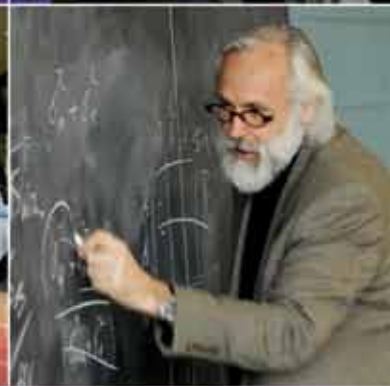




UNIVERSITÉ
BISHOP'S
UNIVERSITY

BISHOP'S UNIVERSITY



2009/10

Academic Calendar



The Mission Statement

In 1843 the founders of Bishop's University declared their intention "to offer to the country at large the blessing of a sound and liberal education." Today our goal remains the education of individuals, primarily at the undergraduate level, to develop their talents and realize their leadership potential. Intellectual achievement is crucial to our mission and thus the University promotes academic excellence through an emphasis on teaching enriched by scholarship and research. The Bishop's experience begins with close interaction between professor and student but extends beyond the classroom to provide the basis for critical thinking and effective communication, while also fostering community spirit and lasting friendships. Located in the bilingual setting of the Eastern Townships, Bishop's offers students from Quebec, Canada, and the International community the opportunity to exercise the rights and responsibilities of good citizenship and to engage in the tolerant and informed dialogue that sustains democracy.

**A — SERVICES**

1. John H. Price Sports Centre
2. Coulter Field
3. W.B. Scott Arena/outdoor pool
4. Centennial Theatre
5. Artists' Centre (Art Gallery)
6. Bandeen Hall (Music Dept.)
7. Residence/Conference Services
8. Security
9. Golf course
10. Panda Daycare Centre
11. University Bookstore
12. Health Services

B — RESIDENCES & DINING FACILITIES

1. Dewhurst Dining Hall
2. Abbott Hall
3. Kuehner Hall
4. Munster Hall
5. Mackinnon Hall
6. Norton Hall
7. Pollack Hall
8. Adams Dining Room (A.D.R.)
9. Paterson Hall

C — ADMINISTRATIVE & AUXILIARY BUILDINGS

1. St. Mark's Chapel
2. McGreer Hall (Administration, Liaison/Admissions, Visitors)
3. Service Buildings
4. Bishop Mountain House (Student Centre)
5. Marjorie Donald House (Student Centre)
6. Faculty Residences
7. "Hangar"
8. Peter D. Curry Wetland Habitat

D — ACADEMIC BUILDINGS

1. Johnson Science Building
2. Bassett Memorial Library
3. Divinity House
4. Morris House
5. Hamilton Building
6. Nicolls Arts Building (Continuing Education / Éducation permanente)
7. Cormier Centre/Dobson-Lagassé Centre
8. Molson Fine Arts Building

E — Champlain College**P — Parking for Visitors****Notice**

This Calendar was published in July 2009 for use during the academic year beginning July 1, 2009. **The University reserves the right to make changes in regulations, programs, courses, facilities and fees without prior notice.** In cases where the print version of this Calendar differs from the version posted on the University's website, the print version shall be used as the official text.

Evening Extension and Summer School Calendars are published prior to these sessions. For copies of these Calendars, please contact the Office of Continuing Education of the University.

CREDITS:

Photos:.....Perry Beaton, Tim Doherty, Grant Siméon
 Preparation:Registrar's Office
 Typesetting and design:.....VisImage, Sherbrooke, Quebec
 Printing:.....Blanchard Litho, inc; Sherbrooke, Quebec
 Cover design:Infografik, Sherbrooke, Quebec
 Dépôt légal 3^e trimestre 2009.....Bibliothèque nationale du Québec

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 Sherbrooke, QC J1M 1Z7

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E-mail.....	contedu@ubishops.ca
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Recruitment Office.....	819-822-9600 ext. 2681
E-mail	recruitment@ubishops.ca
Records Office	819-822-9600 ext. 2682
Fax.....	819-822-9616
E-mail.....	records@ubishops.ca
Registrar's Office	819-822-9600 ext. 2682
Fax.....	819-822-9616
Residence Office.....	819-822-9600 ext. 2685
Fax.....	819-822-0705
E-mail	residence@ubishops.ca
Student Accounts, Financial Aid	819-822-9600 ext. 2655
Website	www.ubishops.ca

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Sessional Dates 2009–2011

Fall Semester 2009

24 August	Monday	Beginning of classes for B.Ed. students
2-3 September	Wed-Thu	ESL Placement Testing - Continuing Education - 5:00 pm - Nicolls 209
07 September	Monday	Labour Day
08 September	Tuesday	Advising and registration for new students, exchange students, part-time students. Evening: English Writing Proficiency exemption examination
09 September	Wednesday	Classes begin for all Day and Evening courses
22 September	Tuesday	Last day to add, drop or change sections for all Fall Semester and full-year courses; deadline for fees refund for a dropped Fall Semester course
12 October	Monday	Thanksgiving Day (no classes)
29 October	Thursday	Last day to Withdraw with Permission from any 3-credit Fall Semester course
02 December	Wednesday	Make up day for Thanksgiving Monday classes
02 December	Wednesday	Fall Semester day and evening classes end; Science laboratories close
04 December	Friday	End of classes for B.Ed. students
05 December	Saturday	Fall Semester examinations begin.
18 December	Friday	Fall Semester examinations end
21 December	Monday	Noon: deadline for instructors to submit Fall Semester marks;
24 December – January 2		University closed

Winter Semester 2010

04 January	Monday	Beginning of classes for B.Ed. students
04 January	Monday	Beginning of classes for Education final semester Step 1 students
6-7 January	Wed-Thu	ESL Placement Testing - Continuing Education - 5:00 p.m. - Nicolls 209
08 January	Friday	Registration for new students, exchange students, part-time students.
11 January	Monday	Classes begin for all Day and Evening courses (except B.Ed. students). Evening: English Writing Proficiency exemption examination
25 January	Monday	Last day to add, drop, or change sections of 3-credit Winter Semester courses; Deadline for fees refund for dropped 3-credit Winter Semester courses; Last day to Withdraw with Permission from 6-credit courses and receive half fees refund
25 January	Monday	13-week Internship begins for B.Ed. students
1-5 March	Mon-Fri	Reading Week
08 March	Monday	Last day to Withdraw with Permission from a 3-credit Winter Semester course
08 March	Monday	6-week practicum for Education final semester Step 1 students begins
2-5 April		Easter holiday
12 April	Monday	Make up day for Easter Monday classes
13 April	Tuesday	Make up day for Good Friday classes
13 April	Tuesday	Winter Semester day and evening classes end (except B.Ed. students); Science laboratories close
16 April	Friday	6-week practicum for Education final semester Step 1 students ends
17 April	Saturday	Winter Semester examinations begin (except B.Ed. students)
30 April	Friday	Winter Semester examinations end (except B.Ed. students)

30 April	Friday	B.Ed. students' Internship ends; classes for Education final semester Step 1 students ends
04 May	Tuesday	Noon: deadline for instructors to submit Winter Semester marks;
12 June	Saturday	Convocation Day

Summer Semester 2010

28-29 April	Wed-Thu	ESL Placement Testing – Continuing Education – 5:00 p.m. – Nicolls 209
3-4 May	Mon-Tue	Spring Semester classes begin (Day and Evening)
10 May	Monday	Last day to add or drop Spring Semester courses; deadline for fees refund for dropped Spring Semester courses.
24 May	Monday	Victoria Day (no Spring Semester classes); English Language Summer School I begins
27 May	Thursday	Last day to Withdraw with Permission from Spring Semester courses
28 May	Friday	Make-up day for May 24 holiday
14-15 June	Mon-Tue	Spring Semester Day and Evening examinations
16-17 June	Wed-Thu	Summer Semester classes begin (Day and Evening)
24 June	Thursday	Fête nationale holiday (no classes)
25 June	Friday	Make-up day for June 24 holiday
25 June	Friday	Last day to add or drop Summer Semester course; deadline for fees refund for dropped Summer Semester courses.
25 June	Friday	English Language Summer School I ends
28 June	Monday	English Language Summer School II begins
01 July	Thursday	Canada Day holiday (no classes)
02 July	Friday	Make-up day for July 1 holiday
04 July	Sunday	Executive English programme begins
05 July	Monday	Graduate Summer School in Education begins
12 July	Monday	Last day to Withdraw with Permission from Summer Semester courses
15 July	Thursday	Add-drop-change deadline for Graduate Summer School in Education; deadline for fees refund
22 July	Thursday	Withdraw with Permission deadline, Graduate Summer School in Education
28-29 July	Wed-Thu	Summer Semester Day and Evening examinations
30 July	Friday	English Language Summer School II ends; Executive English programme ends
06 August	Friday	Graduate Summer School in Education ends

Fall Semester 2010

08 September	Wednesday	Classes begin for all Day and Evening courses (except B.Ed. students)
17 December	Friday	Fall Semester examinations end

Winter Semester 2011

10 January	Monday	Classes begin for all Day and Evening courses (except B.Ed. students). Evening: English Writing Proficiency exemption examination
29 April	Friday	Winter Semester examinations end (except B.Ed. students)

Summer Semester 2011

2-3 May	Mon-Tue	Spring Semester classes begin (Day and Evening)
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General Information

Characteristics

Bishop's is a predominantly residential university whose primary concern is offering to undergraduate students a quality education in arts, sciences, business administration, and education. Its academic programs are broadly based and stress the interrelationships of disciplines rather than their specializations. The residential aspect and small size of the University encourage an informal atmosphere in academic and social situations. Emphasis is placed on personal contact between faculty and students through small classes and frequent use of seminars, laboratories and tutorials. Self-directed study is encouraged with student research projects and special independent study programs. Approximately 2,260 full-time and part-time students were enrolled in Bishop's courses in 2008-09.

Location

Bishop's University is attractively situated in the Sherbrooke borough of Lennoxville, amid the rolling hills of the Eastern Townships of southern Quebec. The campus occupies a 500-acre tract at the junction of the St. Francis and Massawippi rivers, bordered on the west by Lennoxville and on the east by open countryside. Several lakes, bike trails, and numerous ski resorts within short driving distances supplement the recreational facilities on the campus.

Origin and Development

The University was founded as Bishop's College in 1843 under the sponsorship of the Right Reverend G. J. Mountain, third Anglican Bishop of Quebec, with the assistance of a group of clergy and laymen of the Eastern Townships. According to the intention of its founders, Bishop's was to have two functions: "to offer to the country at large the blessing of a sound and liberal education" and to provide training for the clergy. Ten years later, in 1853, the College received a royal charter granting it the right to confer degrees.

The early development of Bishop's was gradual. Its original grant of land, forty acres, was donated by Lieutenant-Colonel William Morris. On this site, the first building, consisting of the five central bays of what is now McGreer Hall, was erected and occupied in 1846. The chapel was consecrated in 1857, an Arts Building in 1861 (destroyed by fire in 1891), a New Arts Building (now the Johnson Building) and Divinity House in 1892. The first degrees granted by Bishop's, in 1854, were in Arts and Divinity. In 1871, a medical faculty was established in Montreal, which functioned until 1905 when it was merged with the Medical Faculty of McGill University. A small Faculty of Law awarded 15 degrees between 1881 and 1888. Specialized programs in Professional Education and in the Natural Sciences were introduced in the 1920's.

The administration of Bishop's remained under the aegis of the Church of England until 1947 when the Corporation of the University was reconstituted as a nondenominational body.

In 1949, an extensive development program was initiated with public support. Most of the present facilities have been constructed since that time: Norton Hall and Pollack Hall residences, the Memorial Gymnasium (now Memorial House, part of the students' centre) and the central heating plant in 1949-50; the John Bassett Memorial Library, Mackinnon Hall residence and several faculty

houses in 1958-59; the W.B. Scott Memorial Rink in 1961; the Jasper H. Nicolls Arts Building, the John Hamilton Administration Building and Bishop Mountain House students' centre in 1962-63; Abbott Hall, Kuehner Hall and Munster Hall residences in 1964-66; a new wing to the Andrew S. Johnson Science Building in 1966; the Centennial Theatre in 1967; an addition to the John Bassett Memorial Library in 1970; a new football stadium in 1971; the John H. Price Sports and Recreation Centre in 1975; Marjorie Donald House, a new wing of the students' centre, in 1977. The Molson Fine Arts Building and an extension to the library were added in 1990. The Centennial Theatre was renovated and expanded to include an Art Gallery in 1991. In 1998, improvements were made to Memorial House and Marjorie Donald House, which now form part of the University Centre. An apartment-style residence, Paterson Hall, was opened in the fall of 2003.

Since 1949, the student body and faculty have more than trebled in size. Many new programs have been introduced, including a Bachelor's degree program in Business Administration, numerous specialization options, and a variety of inter-disciplinary programs. In 1970, following the institution of colleges of general and vocational education (CEGEPs) at the preuniversity level in Quebec, Bishop's, along with other universities in the Province, reorganized its undergraduate programs to lead to the Bachelor's degree in three years of study beyond the collegial level.

Thus, Bishop's University had its beginnings more than a century and a half ago as a private college supported by the Church of England. During its early development, a strong humanistic tradition was established in its programs and teaching. Since 1949, the University has evolved rapidly as part of a provincially-supported system of higher education. Bishop's assumes a distinctive role in this system as a relatively small and residential university with broadly-based programs. Bishop's aims to offer a well-rounded liberal education adapted to the needs and opportunities of the day.

Academic Organization

Bishop's has integrated its academic resources into a single faculty to facilitate communication in academic affairs within the University and to provide maximum flexibility in the design of programs. Academic disciplines (e.g. history, geography, biology) are represented by departments which are grouped into three areas — Arts and Science (including the Divisions of Humanities, Natural Sciences and Mathematics, and Social Sciences), the Williams School of Business, and the School of Education.

Programs

Bishop's undergraduate programs lead to Bachelor's degrees in arts, science, business and science, education and business administration. Subjects offered for Honours or Major specialization in arts include biology, business administration, classical studies, drama, economics, education, English, environmental studies and geography, Études françaises et québécoises, fine arts, German studies, hispanic studies, history, liberal arts, modern languages, mathematics, music, philosophy, political economy, political studies, psychology, religion, sociology and gender studies. In science, the major subjects are biochemistry, biology, chemistry, computer sci-

ence, mathematics, physics and psychology (neuroscience). Interdisciplinary concentrations or minor specializations are also possible in many areas, including a unique Liberal Arts-Engineering program offered in collaboration with the Université de Sherbrooke.

Students may design their programs within a broad framework of options. A student may opt to major in a single subject — e.g. English, psychology, or chemistry; in a group of subjects represented by a division of the University — e.g. humanities, natural sciences, or social sciences; or in some combination of subjects from more than one division — e.g. geography and history, or mathematics and music. Honours programs are offered in many subjects. Major or honours and minor specializations may be combined in a program.

In addition to offering undergraduate programs leading to the B.Ed. degree, the School of Education prepares graduates for the Master of Arts in Education, and the Master of Education.

Part-Time Studies

Bishop's University is dedicated to fulfilling the lifelong learning needs of community part-time students, and offers courses in Knowlton and St. Lambert as well as on the Lennoxville campus. Its mission is to assure accessibility within the Eastern Townships to high quality educational programs for adult learners pursuing part-time degree and certificate studies and those seeking personal and professional development. A variety of degree courses are offered year round in the Fall, Winter, Spring, and Summer sessions.

Undergraduate Scholarship Program

The Bishop's University Scholarship program includes both Entrance and Second/Third Year Scholarships. All scholarships are awarded on the basis of academic standing only, with no consideration of financial need, and are available to students currently studying in Canada and the United States.

The Entrance program offers scholarships to CEGEP and high school students enrolling for the first time at Bishop's. These scholarships may be held for their full University program by qualified students.

The Second/Third year program offers scholarships each year to qualified students who did not receive Entrance Scholarships. These awards are based on their academic standing at the end of their first or second year at Bishop's, and are also renewable for the remainder of their University program by students who maintain a first class standing.

For more detailed information on these and other awards, please refer to the Scholarships section or contact

Director of Admissions

Bishop's University
2600 College Street
Sherbrooke, Quebec
J1M 1Z7
telephone: 819-822-9600 ext 2680
e-mail: admissions@ubishops.ca

Association with Champlain Regional College

Champlain Regional College is part of the provincial system of colleges of general and vocational education (CEGEPs). One of its three sites has been on the campus of Bishop's University since 1971. While Champlain's administrative offices and some class-

rooms are located in the College's own building, virtually all other campus facilities are shared with Bishop's. A spirit of mutual cooperation between the two institutions and student bodies has allowed this arrangement, unique in the province, to succeed.

Please note that particular application and course registration deadlines for each institution must be observed. It is advisable to contact the Admissions Office for further information.

Inquiries about Champlain should be addressed to:

Champlain College Lennoxville

2580 College Street

Sherbrooke Quebec

J1M 1Z7

Tel: 819-564-3666 ext. 251

e-mail: admissions@crc-lennox.qc.ca

Affiliation with the Thomas More Institute for Adult Education

Qualified graduates of the Thomas More Institute for Adult Education, 3405 Atwater Avenue, Montreal, Quebec, may be granted the Bachelor of Arts degree by Bishop's University, by an affiliation agreement concluded by the two institutions in 1974. The degree program of the Thomas More Institute is designed for mature adults, normally over 23 years of age, and offers to such persons a special opportunity to continue their formal education in the liberal arts tradition. For information: 514-935-9585.

Cours spéciaux pour étudiants francophones

Institution anglophone située au coeur des Cantons-de-l'Est, l'Université Bishop's est l'endroit idéal pour l'étudiant non-anglophone qui désire apprendre ou perfectionner la langue anglaise.

Afin de permettre aux étudiants d'élargir et d'approfondir leur connaissance de l'anglais, le département d'éducation permanente a mis sur pied des cours spéciaux, la plupart étant non-crédités et d'autres (les niveaux avancés) applicables à un grade. Ces cours ont lieu surtout le soir, pendant l'année scolaire régulière, de septembre à avril, et aussi durant les sessions d'été, soit du mois de mai au mois de juillet.

Le programme comporte une succession de cours généraux d'anglais langue seconde axés sur la conversation (six niveaux), d'anglais à des fins particulières (tels les affaires, les médias, la grammaire avancée, la phonétique ainsi que la lecture et rédaction efficace) et des cours de littérature offerts par le département d'anglais.

Ces cours d'anglais langue seconde sont accessibles tant aux étudiants réguliers qu'aux étudiants à temps partiel, mais le nombre de places est restreint. Ainsi, afin de pouvoir suivre ce programme, les étudiants à temps plein devront obtenir la permission du coordonnateur de l'Éducation permanente.

De plus, durant les mois de mai, juin, juillet et août, l'Éducation permanente offre des programmes intensifs d'immersion en anglais — l'École d'été le langue anglaise I et II — des programmes de Bourses subventionnés par le Conseil des Ministres et Patrimoine Canada. L'horaire quotidien comprend des cours, clubs de conversation, laboratoire de langue informatisé, des ateliers de théâtre, musique, art oratoire avec débat parlementaire, journal, création littéraire, narration et laboratoire de langues informatisé et des activités socio-culturelles. De plus, l'étudiant a la possibilité d'assister comme auditeur libre aux cours du soir réguliers dans divers domaines.

Ainsi, l'École d'été de langue anglaise offre une excellente préparation pour les études éventuelles en anglais.

Anglais langue seconde — Études de premier cycle

Ce programme intensif de jour est destiné aux étudiants universitaires qui ont déjà atteint un niveau intermédiaire de compétence en anglais. Le programme a comme objectif de développer l'habileté de fonctionner avec aisance dans des milieux académiques et professionnels. Tous les professeurs, hautement qualifiés, possèdent une Maîtrise et un Certificat d'enseignement d'une langue seconde.

Le nombre d'étudiants à ces cours de langue anglaise étant limité, chacun peut profiter d'une attention plus personnelle de la part de professeurs chevronnés.

L'Université porte un intérêt tout spécial au progrès des étudiants inscrits à ces cours d'anglais langue seconde et a à cœur de les aider à satisfaire leurs intérêts et leurs besoins.

La vie en résidence est une autre des caractéristiques de l'Université Bishop's, et près de 30% des étudiants y logent. Chaque année, de nombreux étudiants francophones disent trouver enrichissante cette forme de vie communautaire. De plus, le contact quotidien avec des étudiants anglophones les aide à maîtriser plus rapidement la langue anglaise tout en élargissant leurs horizons sur le plan culturel.

Enfin, l'Université étant consciente des difficultés inhérentes aux études universitaires dans une autre langue, il est souvent permis à l'étudiant, avec l'accord de son instructeur, de soumettre ses travaux et d'écrire ses examens en français. Cette pratique est très appréciée des étudiants francophones, particulièrement au cours des premiers mois d'adaptation à l'Université. (Voir l'avis « Language of Instruction » dans la section « University Regulations »).

Rappelons que l'Université Bishop's offre des possibilités

uniques aux étudiants francophones qui désirent y poursuivre leurs études universitaires. En plus d'une gamme variée et étendue de cours dans toutes les disciplines et des cours d'anglais adaptés aux étudiants nonanglophones, l'Université bénéficie d'excellentes installations sportives et récréatives, d'un terrain magnifique de 500 acres sur lequel sont situées les résidences, et d'une qualité de vie exceptionnelle. L'Université Bishop's constitue vraiment l'endroit rêvé pour faire des études universitaires.

Pour plus de renseignements concernant les conditions d'admissions à l'Université Bishop's, veuillez vous adresser au :

Bureau des admissions

Université Bishop's
2600 rue College
Sherbrooke, Quebec
J1M 1Z7
Tél. : 819-822-9600 poste 2680
Email: admissions@ubishops.ca

Pour plus de renseignements concernant les programmes d'été ou les cours d'anglais langue seconde, veuillez vous adresser au :

Bureau de l'éducation permanente

Université Bishop's
2600 rue College
Sherbrooke, Quebec
J1M 1Z7
Tél. : 819-822-9670 ou 1-877-822-8900
Email: kstandis@ubishops.ca



Admission

For general information, inquiries from prospective students should be directed as follows:

Recruitment Office

Bishop's University
2600 College Street
Sherbrooke, Quebec
J1M 1Z7
Telephone: 819-822-9600 ext. 2681
or 1 877-822-8200
Email: recruitment@ubishops.ca

Application forms, calendars, and prospectuses are distributed by this office, or via the Bishop's WEB page at: www.ubishops.ca.

Application

Application forms and required information and documents should be submitted to:

Admissions Office

Bishop's University
2600 College Street
Sherbrooke, Quebec
J1M 1Z7
Telephone: 819-822-9600 ext. 2680
or 1-877-822-8200
Email: admissions@ubishops.ca

All applications must be accompanied by:

- (i) A non-refundable application fee of \$55.00 (in Canadian funds);
- (ii) A complete and up-to-date transcript of all relevant academic records, including current mid-year examination results and/or a description of activities since completing academic studies if not currently studying;
- (iii) Canadian residents: Copy of birth certificate (passports not accepted) or a copy of both sides of your Canadian Citizenship or Permanent Resident card.

International students are required to supply the following additional information:

- (i) Proof of English competency:
 - a. Test of English as a Foreign Language (TOEFL) results — minimum of 580 (paper based) or 237 (computer based) or 90 (internet based) is normally required
 - b. University of Michigan English Language Assessment Battery (MELAB) results — minimum of 85 is normally required
 - c. International English Language Testing System (IELTS) results — minimum of 6.5 is normally required
Exception: applicants to the Intensive Certificate in English as a Second Language (see the appropriate section of this Calendar)
- (ii) SAT or ACT scores (U.S. high school applicants only).
Applications from students who have completed their secondary or post-secondary schooling in Canada should normally be submitted by February 1 for the B.Ed. in the School of Education; for all

other programs the deadlines are March 1 for the fall semester and by October 15 for the winter semester. Applications continue to be accepted following these dates; however, admission of late applicants is subject to space availability in addition to academic criteria. Note: only those applications received by these deadlines are eligible for entrance scholarship consideration.

Applications from students educated outside Canada should be submitted by November 1 for January admissions, and by July 1 for fall admissions. All required documentation from these applicants must be received by November 30 and July 31 respectively.

Although our Admissions Office is always pleased to meet prospective students, a personal interview is not required for admission.

ADMISSION — DEGREE STUDIES

General Information:

1. Decisions on admissibility, advanced standing and re-admissibility of applicants to undergraduate programs are governed by the admissions policy determined by the Senate of Bishop's University. This policy is administered by the Divisional Deans and the Director of Admissions. Decisions made by the Divisional Deans concerning admission to the University are not appealable.
2. Evaluation of a student's eligibility for admission to the University is based on the student's performance in the most recent year of academic study, although other factors may be taken into consideration where appropriate.
3. Students withholding, misrepresenting or supplying incomplete information concerning their previous academic performance or standing will be required to withdraw from the University should that information change the conditions on which their admission to the University was based.
4. The number of admissions is limited and the University is not bound to accept any or all applicants who may possess the minimum admission requirements.
5. The minimum credit requirement for a bachelor's degree is determined by the student's secondary or CEGEP level studies completed, with the exception of those admitted as Mature students and second degree applicants.
6. Applicants who have demonstrated academic excellence may be admitted to the University on the basis of criteria other than those listed herein.
7. Formal written notification from the Director of Admissions is the only valid statement of a student's position. Opinions expressed by or information provided by individuals are not binding unless confirmed in writing by the Director of Admissions, the appropriate Divisional Dean or the Director of the School of Education.
8. Students may be exempted from an introductory course at the University when they have completed comparable non-university course work elsewhere. No credit will be granted towards their Bishop's degree for the exemption. Any exempted course must be replaced by a Bishop's course of equal credit.

For specific information on admission requirements for the Bachelor of Education, see Admission — Teacher Education Programs.

CEGEP Applicants:

1. The CRC-score is used for admission purposes
2. Admission would normally be to a three year (93 credit) program and would be provisional on the successful completion of the D.E.C. (Collegial Diploma) before a student enters the University. Students with an incomplete D.E.C. are not eligible for admission.

Exception: Individual applicants with acceptable academic performance but without the D.E.C. may be admissible with one CEGEP course missing, on receipt of a written explanation (with supporting documentation as required) of the reason(s) the D.E.C. is not completed. Decisions in these exceptional cases will be made by the appropriate Divisional Dean. If admitted, these students must complete the remaining requirements for their D.E.C. within 12 months of their first registration at Bishop's.

3. Quebec residents who leave the province to complete Grade 12, Ontario OSSD/OAC, college or university level studies without completing (or attempting) their D.E.C., will be considered on an individual basis. Admission would normally be to a four year (123 credit) program, minus any applicable credit for post-secondary work completed.

Canadian High School Applicants:

1. Averages for admission purposes include academic courses ONLY. Physical Education results are not included in the calculations except in the case of Ontario high school courses (U or M).
2. The applicant's Grade XII studies must include at least one course in English for all programs, at least one course in mathematics for Business Administration, and one in mathematics and two in other sciences for Natural Sciences.
3. Applicants with a completed Grade XII Diploma will be considered for admission to a four year (123 credit) program.

International Baccalaureate / Advanced Placement (AP) Examinations

1. Students who have completed a full International Baccalaureate Diploma with a grade total of 28 may be considered for admission to a three year (93 credit) program. Students without the Diploma may be considered for admission to a four year (123 credit) program. Credit for individual Higher Level courses may be given against a four year program if the grade is 5 or better.
2. Advanced Placement (AP) examinations completed with a result of 4 or better will be accepted for credit against a (four year) 123 credit program.

Exceptions: Computer Science A and Physics B.

Transfer Applicants:

1. Applicants who have completed more than one semester at another college or university will be evaluated as transfers from

that college or university. Transfer students must normally 1) be eligible to return to the institution they have been attending and 2) fulfill the specific academic admission requirements of the program to which they are applying at Bishop's.

2. Transfer students are not affected by the Mature student policy. Admission would be to a program with credit requirements determined by the student's CEGEP (Quebec) or high school (non-Quebec) standing.
3. Transfer students from completed CAAT (Ontario) programs in General Arts and Sciences or Business Administration may be eligible for advance credit, granted at the discretion of the appropriate Divisional Dean. Bilateral agreements are in place with specific CAAT programs regarding transfer credit; please consult the Admissions Office for detailed information. Although course exemptions may be possible, no credit will be awarded for incomplete programs.
4. Transfer students from universities or colleges other than CAATs may be eligible for advanced credit granted at the discretion of the appropriate Divisional Dean on presentation of official transcripts and course descriptions for evaluation. Transfer credit is awarded subject to the regulations governing credit for studies completed elsewhere and subject to further review should the student change programs. (see Credit for Studies Completed Elsewhere)
5. Persons holding a Bachelor's degree will be considered for admission to a program leading to a second Bachelor's degree. Admission would be to a minimum one year, 30 credit program PLUS any additional credits required by the Department. (see Regulations for Bachelor's Degrees)
6. Teachers holding the Quebec Class II Permanent Diploma will be considered for admission to a 60 credit Arts program.

International Applicants:

1. An applicant is classified as international for purposes of admission if they have completed their latest year of full-time studies outside of Canada. Canadian citizenship does not change the admission classification, but determines the applicable fee structure. (see Fees section; also Additional Information for Permanent Residents, below.)
2. Applicants from the American high school system with a Grade 12 diploma will normally be considered for admission into a four year (123 credit) program. Applicants will be evaluated based on:
 - a) their SAT scores: a combined total (Math, Critical Reading and Writing) of 1650 is required for admission. Applicants with scores below 1650 will be considered on an individual basis by the appropriate Divisional Dean;
 - b) the ACT results: a composite score of 23-24 is required for admission.
3. Other international applicants are evaluated on an individual basis by the appropriate Divisional Dean. Admission, if granted, will normally be to a four year (123 credit) program. Exception: Mature student applicants.
4. If admitted, an applicant whose first language is not English, and who does not present proof of an acceptable level of English competency (TOEFL: 580 paper-based, 237 comput-

er-based, 90 ibTOEFL; MELAB: 85; or IELTS: 6.5; or successful completion of the University's Writing Proficiency Test) will be required to register in an English as a Second Language (ESL) course or courses. Students who do not comply with this regulation in each semester will be de-registered for that semester.

Mature Student Applicants:

1. Admission to university studies may be granted to mature applicants who do not satisfy the usual academic requirements of the University.
2. Mature student applicants must:
 - a) be 21 years of age or older by September 1 for the Fall semester, January 1 for the Winter semester, in any given year;
 - b) normally not have registered for full-time studies at CEGEP (Quebec students) or high school (non-Quebec students) or a college or university for at least 24 months;
 - c) satisfy the University that they have the potential to be successful in undergraduate courses, normally through the successful completion of at least three university-level courses in one semester on a part-time basis, and/or the evaluation of previously completed studies.
3. Admission would be to a three year (93 credit) program, plus any applicable prerequisite courses.

Part-time General Interest Applicants:

Part-time students are those students registering in less than 12 credits, including lab credits, in any semester, who:

1.
 - a) have been formally admitted to a degree or certificate program OR
 - b) have not applied for admission to a specific degree or certificate program but who wish to complete courses out of general interest or as audit students. (Audit courses are charged fees in the same manner as credit courses.) These students, when admitted, are classified as Special Undergraduate General Interest (SPU) students.
2. New applications for admission as part-time students are received by The Admissions Office. Admission is subject to a review of the academic background of the applicant by the appropriate Admissions Committee. In addition, part-time students as defined in 1(b) above must normally satisfy the following minimal admission requirements:
 - a) Minimum of 19 years of age on date of registration for the semester (except for applicants to the English Language Summer School, who may be 18 years of age); OR
 - b) Successful completion of a Collegial Diploma (Quebec students) or high school (non-Quebec students).
4. Any student who has been refused admission to a degree program may not register on a part-time basis without the permission of the appropriate Divisional Dean.
5. Part-time General Interest students who wish to register in regular daytime courses must obtain the written permission of the

faculty member(s) concerned and must be registered in the course(s) by the same faculty member(s).

6. The academic progress of all part-time students will be reviewed by the Admissions Office prior to acceptance of their registration in a semester. (see Academic Standing: Probation and Must Withdraw Status)
7. Part-time General Interest students may make application for admission to complete the requirements for a degree at any time. (see Admissions — Degree Studies)

However, following completion of 30 credits at the latest, part-time students not admitted to a degree or certificate program will be asked to make application in writing to a specific degree objective after consulting the relevant Dean or departmental chairperson. Their admissibility will be determined by the Admissions Committee. Students who do not wish to make application to a specific degree objective at this time may be allowed to continue their studies only with the written approval of the appropriate Divisional Dean.
8. Part-time students who have been formally admitted to a degree program who wish to change to full-time status must make a written statement of their intention to make such a change to the Admissions Office prior to the beginning of the semester in which they wish to register full-time. This includes those students who may have attended the University on a full-time basis in a previous semester.
9. Full-time students wishing to change to part-time status must make a written statement of their intention to make such a change to the Admissions Office prior to the beginning of the semester in which they wish to register part-time.
10. Students in an undergraduate degree program who do not register at the University for 12 months or more must reapply for admission to the University. (see Interrupted Studies)
11. Part-time General Interest students who wish to be considered for admission to a degree program must normally satisfy the formal admission requirements of the University as specified for degree studies.
12. Part-time General Interest students who have not fulfilled the requirements for admission to a degree program before commencing general interest studies may be evaluated for degree admission based on their performance.
 - a) A minimum of 3 courses (9 credits, not including full-year courses) successfully completed in one semester with an average of 65% or more is normally required for guaranteed admission. All applicants not meeting this standard will be evaluated on an individual basis by the Admissions Committee. Note: Individual Departments may have requirements in addition to the 65% average.
 - b) Students holding a high school diploma from outside the province of Quebec would be admitted to a four year (123 credit) program; students holding a CEGEP diploma would be admitted to a 3 year (93 credit) program unless the applicant qualifies as a Mature applicant. (see Mature Student Applicants)

Additional Information for Applicants Who Are Permanent Residents (Landed Immigrants) in Canada:

1. No applications will be accepted after July 1 for the Fall semester, or after November 1 for the Winter semester. Limited enrollment programs may have earlier application deadlines.
2. **Applicants over 21 years of age who have not completed studies in North America:**
 - must present official academic transcripts, as well as official translations of those transcripts, for high-school, college or university-level work completed;
 - admission will be granted at the discretion of the departmental chair and the appropriate Divisional Dean;
 - admission, if granted, would be to a three year (93 credit) program plus any required prerequisite courses;
 - students who have completed studies outside North America and wish to be considered for transfer of credit and/or second degree admission must obtain an “Évaluation comparative des études effectuées hors du Québec” from the Quebec Ministry of Immigration. No credit will be awarded without the Attestation.

Applicants over 21 years of age who have completed studies in North America:

- must present official transcripts of the courses completed;
- admission eligibility will be determined by the level of studies completed and the performance in those studies;
- admission, if granted, would be to a program length based on the previous level of studies completed plus any required prerequisite courses;
- students who have also completed studies outside North America and wish to be considered for transfer of credit and/or second degree admission must obtain an “Évaluation comparative des études effectuées hors du Québec” from the Quebec Ministry of Immigration. No credit will be awarded without the Attestation.

Applicants under 21 years of age:

- must obtain an “Évaluation comparative des études effectuées hors du Québec” from the Quebec Ministry of Immigration for studies completed outside North America OR present official transcripts for work completed in North America;
 - admission, if granted, would be to a four year (123 credit) program minus any transfer credits, if applicable.
3. If admitted, an applicant whose first language is not English who does not present proof of an acceptable level of English competency (TOEFL: 580 paper-based; 237 computer-based; 90 ibTOEFL; MELAB: 85; or IELTS: 6.5, or successful completion of the University's Writing Proficiency Test) will be required to register in an English as a Second Language (ESL) course or courses. Students who do not comply with this regulation in each semester will be de-registered for that semester.

ADMISSION – TEACHER EDUCATION PROGRAMS

Bishop's University's Teacher Education program offers two Bachelor of Education degrees:

- a. Secondary Teacher Education
- b. Elementary Teacher Education — Educational Studies

Both programs consist of two distinct parts:

Step One – a B.A. in Educational Studies (elementary), or a B.A. or B.Sc. with a Double Major in Education and a teaching discipline (secondary);

Step Two – the Bachelor of Education, which is entered following the completion of the B.A. in Educational Studies (elementary), or the B.A. or B.Sc. with the Double Major (secondary). This is a one-year, 36 credit program. Acceptance to Step Two is not automatic. Students are admitted according to criteria established by the School of Education. Successful completion of the Bachelor of Education allows the School of Education to recommend students for certification to the Ministry of Education.

Candidates including applicants from other universities, who already hold an appropriate undergraduate degree, may be eligible for consideration for admission to the Bachelor of Education if they show exceptional promise. These candidates must successfully complete the prerequisites for the Bachelor of Education — the required discipline and education courses. They must also comply with the regulations of good standing as indicated in the Education section.

Admission to Step One

Important: Admission to Step One of the program does not guarantee admission to Step Two.

Students in Elementary or Secondary Teacher Education programs must consult the Academic Calendar under the School of Education for course requirements.

Students making application to the programs in Education must fulfill the normal entrance requirements of the University.

Admission to Step Two

1. Students wishing information on making application are referred to the School of Education for program information.
2. Applications are available from the University's Website. Applications and all documentation should be submitted to the Admissions Office.

The deadline for receipt of applications is February 1st.

3. Completed applications will be forwarded to the School of Education for evaluation.
4. The Selection Committee will use the following criteria for selecting internal candidates for the B.Ed.:
 - a) Academic record. Applicants must have a cumulative average of 70% in their first degree.
 - b) All courses in the first degree and all practica must be successfully completed.

- c) Ethical / professional behaviour. Candidates must have met the School of Education's standards for ethical and professional behaviour.

The Selection Committee may waive certain admission criteria for internal candidates.

5. The Selection Committee will use the following criteria in selecting external candidates for the B.Ed.:
 - a. Academic Record.
 - b. Suitability to the profession.

A personal interview is conducted at the School of Education where evidence of good communication, problem-solving and organizational skills, the ability to work as a member of a team and strong self-evaluation skills should be demonstrated.
6. Decisions by the selection committee regarding admission to the Bachelor of Education program are binding.

Admission – Masters of Arts in Education, Masters in Education, the Certificate in Teaching English as a Second Language, and the Principal's Professional Certificate Program

1. Students wishing information on making application are referred to the School of Education for program information.
2. The deadline for receipt of applications is March 1st for consideration for the summer and fall semesters and September 1st for the winter and spring semester. Applications and all documentation should be submitted to the Admissions Office.
3. Completed applications will be forwarded to the Admissions Committee of the School of Education for evaluation. This committee will meet regularly throughout the year to consider applications, as soon as possible following the application deadlines.
4. Admission criteria:

A minimum grade of 75% in undergraduate or previous graduate studies is required. Evaluation procedures will also include an interview, when possible. See additional requirements in the School of Education section of this Calendar.
5. The School of Education will report to the Vice-Principal the decisions on admission.
6. Only a limited number of students can be admitted to each program, each year.
7. Students wishing to complete courses in the School of Education without being admitted to the M.Ed./M.A. or Certificate programs may be classified as Special Graduate (SPG) students in Education. Such students may complete up to 9 graduate level education credits. Admission to graduate courses does not in itself imply candidacy for a graduate degree.

NOTICE OF ADMISSION/RESPONSE DEADLINES/RESIDENCE

1. Admission is conditional upon an applicant's obtaining the grade levels specified in their letter of admission in their final examinations where applicable.
2. Applicants who receive an offer of admission from Bishop's must return the form provided for acceptance of this offer to the Admissions Office accompanied by the confirmation deposit by the date indicated in the letter of admission. Application for residence accommodation or payment of residence deposit(s) do not signify acceptance of an offer of admission.
3. Information from the Office of Residences and Conference Services concerning residence accommodation will be enclosed with the offer of admission if applicable. All activities relating to residence accommodation (application, deposit(s), room assignments) are administered by this Office. Decisions of the Director of Admissions or the appropriate Divisional Dean concerning a student's eligibility for admission to the University are not affected by an applicant's residence situation.

REGISTRATION

1. Students in degree programs will be sent detailed registration instructions for the Fall and Winter semesters. (See Sessional Dates)
2. Students in non-degree programs will register through the Admissions Office
3. All students registering (except ESL, ELSS, and Knowlton, St. Lambert students) for Spring and Summer sessions will register through the Admissions Office
4. ESL, ELSS, Knowlton and St. Lambert students will register through Continuing Education
5. Receipt of registration instructions does not change academic decisions which may have been made, or which will be made, concerning an individual's eligibility to attend Bishop's University. Receipt of registration instructions therefore does not represent permission to register.
6. Registrations are accepted on a provisional basis until verification can be made that the registration complies with any restrictions required by the student's academic or financial standing. If there is a problem, the student will be informed as soon as possible following their registration.



2009–2010 Fees

All students are required to pay their School Fees in full before the start of each semester. All amounts are listed in Canadian funds.

The payment deadlines are as follows:

August 15th for the Fall semester

December 15th for the Winter semester

The University may make changes to this calendar including the fees without notice as advised by the Quebec government and /or as circumstances warrant.

SCHOOL FEES

(Check our website for updated fees)

TUITION FEES:

Canadian fees:	Quebec resident, <i>proof must be provided upon registering</i> ⁽¹⁾	\$65.60 per credit
	Out-of-province, <i>Canadian resident</i>	\$183.36 per credit
International fees:	Science, Mathematics, Computer Science, Drama, Music, Fine Art	\$500.53 per credit
	All other disciplines	\$448.13 per credit

COMPULSORY FEES: *(per fall and winter semester)*

Registration fee	\$40.00
Student Services	\$342.50
Student Fees <i>(listed below)</i>	\$75.00
	<hr/>
	\$457.50

SRC Activity fee	\$38.50
SRC Quad yearbook	9.00
Campus Newspaper	7.50
Refugee Sponsorship	2.50
Library Contribution	15.00
Environmental Levy	2.50
Total Student Fee	<hr/>
	\$75.00

Copyright fees\$0.78 / credit

OTHER FEES: *(new students only)*

English Writing Proficiency Test (EWP)	\$30.00
Students' Representative Council (SRC) Orientation Fee	\$75.00

- (1) Regulations imposed by Quebec Ministry of Education oblige students to provide proof of Quebec residency **at time of registration** in order to be charged the Quebec tuition rate. Students who fail to provide the required proof must pay additional fees as prescribed by the Ministry. Students **born in Quebec** who provide a copy of their birth certificate are classified as Quebec residents. Students **born outside of Quebec** must meet certain criteria. Visit this website at www.meq.gouv.qc.ca/ens-sup/ENS-UNIV/rensgen-univ.htm under the “**Guide d’application de la politique des droits de scolarité universitaires exigés des canadiens et des résidents permanents.**” You may inquire at the Business Office or visit our website.
- (2) Out-of-Province Students enrolled in the French Major or Honors pay the Quebec rate on their entire tuition provided they meet the academic requirements and enroll in a minimum of 2 or 3 French courses per semester in order to complete their French program. Out-of-Province and International Students enrolled in French courses in other programs can pay Quebec fees for the French courses only. Students holding French citizenship are permitted to pay the Quebec rate.

Example of 2009–2010* Tuition and Compulsory Fees (15 credits):

*(based on 15 credits per semester and not including other compulsory or incidental fees)

	Compulsory	Total per	Total	
<i>*Fees are subject to change.</i>	Tuition	Fees	Semester	Fall & Winter
Canadian fees:				
Quebec resident	\$984.00	+	\$457.50 = \$1,441.50	\$2,883.00
Out-of-province	\$2,750.40	+	\$457.50 = \$3,207.90	\$6,415.80
International fees:				
Science, Mathematics, Computer Science, Drama, Music, Fine Arts	\$7,507.95	+	\$457.50 = \$7,965.45	\$15,930.90
All other disciplines	\$6,721.95	+	\$457.50 = \$7,179.45	\$14,358.90

limited to 100% refund of fees less a withdrawal fee of \$50.
After this date there will be no refund.

Payment of Fees

School Fees must be paid in full before the start of each semester. The due dates are as follows:

Fall semester	August 15th
Winter semester	December 15th

A late payment fee of \$65 will apply for all payments made after Aug. 15th for the Fall and Dec. 15th for the Winter. Delaying payment may also result in limited course availability. Students with outstanding fees and balances are charged interest on their outstanding balance at the end of each month at a rate of 15% per annum (1.25% per month). *Failure to pay outstanding balances may result in the withholding of transcripts and diplomas, the suspension of re-enrollment or other measures.*

Payment of fees should be made based on a 15 credit full load or according to the credits the student will take. If students register in extra courses or labs, they can pay the extra fees up until the Add/Drop deadline.

Methods of Payment

Payments may be made by cheque (Cdn Funds), with on-line banking (Bank of Montreal, Desjardins, CIBC, National Bank, Royal Bank, Scotia Bank or TD), or by debit card or cash at our office. International students can pay by making bank transfers

Upon making bank transfers, please ensure to fax 819-822-9661 or e-mail (esther.paquette@ubishops.ca) details of the transfer to ensure that your account is properly updated.

- Should a student leave the University due to illness and does not return during the semester, a refund of 50% of the pro-rated tuition fees **only** will be allowed, provided that a doctor's certificate is attached to the withdrawal form and forwarded to the Records Office. Withdrawal forms may be obtained through the Records Office.

Compulsory Fees

The Registration fee covers services for transcripts, letters of permission, attestations, program changes, and add-drop course processing. The Student Services fee provides access to the following general services on campus: University Library, Sports Centre, Health Clinic, Counseling, Placement Office and Leadership Program. The Student Fees provide for full membership and voting privileges in the Students' Representative Council (SRC), publications, student rates for athletic events, etc. First year students starting in the Fall semester are charged a \$75 fee to cover orientation week activities. Fees do not cover insurance on personal belongings.

Students registered in three courses or more (day or evening) are assessed compulsory fees as itemized previously in the fees table. Part-time students registered in three courses, who can demonstrate full-time activity off-campus and who have legitimate reasons not to be assessed these fees should contact the Business Office before the corresponding Add/Drop deadlines. Upon receipt of appropriate proofs and the validated student I.D. card, the Business Office will assess the part-time fees only.

Exchange Students

Exchange students are required to pay for their residence, meals, books, supplies and medical insurance. Tuition and Compulsory fees are waived.

Medical Insurance

Quebec Immigration authorities require that all international students studying in the province of Quebec subscribe to a health insurance plan for themselves and their dependents coming with them to Quebec.

International students, including Exchange students, must subscribe to the Health Insurance plan offered through the University. Student accounts will be automatically assessed the fee of \$651.00 for twelve months single coverage. Reduced pricing per semester is also available. Please refer to the insurance plan details for information and limitations of coverage: www.ubishops.ca/health_insurance.htm. Students covered by private health insurance are not exempt from the University plan and must enroll.

The following countries have reciprocal medical coverage with the Province of Quebec: France, Denmark, Sweden, Norway, Finland, Luxemburg and Portugal. To benefit from an exemption from the University plan, students from those countries listed must apply to the Régie d'assurance maladie du Québec (RAMQ) upon arrival in Quebec and present a valid Quebec Medicare card to the Business Office. Please refer to: www.ubishops.ca/international/health.htm for more information.

Residence Fees *(subject to change)*

The room-only portion of the residence fees during the academic year varies from \$406.00 per month for a double room to \$510 per month for a single room with semi-private bathroom. All residents must select a meal plan. Meal plan rates vary from \$424 to \$454 per month. (Residence costs may be paid over eight monthly installments). There is an additional charge of \$50 per semester for residence activities. Further details are available in the Residence Handbook (www.ubishops.ca/residence) or from the Residence and Conference Services Office (residence@ubishops.ca).

Residence accommodation is not provided during the Christmas break. Meals are provided during the periods specified in the Residence Handbook (www.ubishops.ca).

Residents may occupy their rooms on the official opening day of Residence each semester, and must vacate them no later than noon on the day following completion of their last examination each semester.

Students planning to arrive on campus after the official opening date must notify Residence and Conference Services of this in writing in order to retain their room allocation.

Student Aid

Bishop's University, through its Foundation, offers scholarships, awards and bursaries. You can visit our website or consult the Scholarships, Loans, Bursaries and Awards section of this Calendar.

Student aid is also available through government loans. Quebec residents may apply for Quebec Loans & Bursaries. Canadian residents may apply for government loans with their own ministry of education. Visit www.canlearn.ca for more information.

Other Miscellaneous Fees

Application Fee (<i>non-refundable</i>)	\$55
BUCS (BBA, Bus.Maj.) (<i>per semester</i>)	\$10
BUPSA - B.U. Part-time Student Ass'n (<i>per semester</i>)	\$15
Confirmation fee deposit (<i>new students only</i>)	\$100
Confirmation fee penalty	\$50
Education speaker's fund (<i>Fall only</i>)	\$10
Field trips and conferences	at cost
Graduation administration fee	\$65
Late payment fee (<i>full-time</i>)	\$65
Late registration fee (<i>full-time</i>)	\$100
Late registration fee (<i>part-time</i>)	\$10

Medical Insurance for International Students

(12 month coverage)	\$651
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Music: Practicum surcharge

MUS 070-071 (<i>per semester</i>)	\$425
MUS 170-270-370/171-271-371 (<i>per semester</i>)	\$425
MUS 172-272-372/173-273-373 (<i>per semester</i>)	\$415
MUS 475 (<i>per semester</i>)	\$450

NSF cheque fee	\$25
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Practice Teaching Travel surcharge

Edu 215/216 (<i>per semester</i>)	\$30
Edu 328/329	\$100
Edu 428/429 (<i>per semester</i>)	\$220

Replacement of Identification card	\$15
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Re-reading of an examination by external evaluators	\$35
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Re-reading of thesis	\$25
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Student Fees SRC (<i>Spring Session</i>)	\$15
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Student Services (<i>Spring session</i>)	\$30
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Supplemental examinations

— each paper (<i>Non-Refundable</i>)	\$25
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Supplemental examinations written off-campus

— each paper (<i>Non-Refundable</i>)	\$75
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Tax receipts – each duplicate copy	\$5
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Thesis Pending (<i>per semester</i>)	\$65.60
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Transcripts (<i>for non-current students</i>)	\$5
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Additional copies of transcripts	\$2
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Withdrawal fee from the University (<i>full-time</i>)	\$50
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For any information regarding the above, you may contact the Business Office at:

telephone: 819-822-9600 extension 2208

fax: 819-822-9661

e-mail: esther.paquette@ubishops.ca

website: www.ubishops.ca



University Regulations

Academic Integrity

1. Preamble

- 1.1 Bishop's University is committed to excellence in scholarship. All members of the University community have a responsibility to ensure that the highest standards of integrity in scholarly research are understood and practiced.
- 1.2 The University takes a serious view of any form of academic dishonesty, such as plagiarism; submission of work for which credit has already been received; cheating; impersonating another student; falsification or fabrication of data; acquisition of confidential materials, e.g. examination papers; misrepresentation of facts; altering transcripts or other official documents.

2. Plagiarism

- 2.1 Plagiarism is a kind of academic dishonesty in which an individual uses the work of another without appropriate acknowledgement. Plagiarism includes but is not limited to the following practices:
 - Using another's work without acknowledgement
 - Copying material without quotation marks
 - Paraphrasing too closely the exact words of the originating author
 - Submitting as one's own work written in whole or in part by another individual
- 2.2 The following practices related to plagiarism are also prohibited:
 - Helping another student plagiarize
 - Submitting in whole or in part work for which the student has received credit in another course, unless the permission of the instructor has been obtained
 - Submitting any statement of fact known to be false or providing a fabricated reference to a source.

3. Procedure in alleged cases of academic dishonesty:

- 3.1 The instructor will meet with the student and reach a decision concerning the matter. In the event that a sanction beyond a warning is required, the Dean will be informed.
- 3.2 In a repeated or particularly serious case, or if the student disputes the decision of the instructor, the Dean will be informed. If necessary, the Dean will meet with the student and the instructor. Another member of the University community may accompany the student. The Dean will make the final decision in the case, including the assignment of a penalty, if any. If the decision is that the student is guilty of academic dishonesty, the Dean will inform the student in writing, and send a copy of this letter to the instructor and to the Registrar. The student may appeal the decision to the Academic Review Committee. See Academic Reviews and Appeals, below.

4. Penalties

The normal penalty for a first offence is a zero grade in the component of the course in which the dishonesty occurred. However, in a case of particular seriousness, or in the case of a repeated offence, penalties may include a zero grade in the course, suspension for one semester or longer, or expulsion from the University.

5. Transcript note

A student who is dismissed from the University for a certain time for academic disciplinary reasons may in the last semester before graduation petition the Academic Standing Committee in writing to have the notation "suspended for academic disciplinary reasons" removed from his or her transcript. The decision to remove would be based primarily on the academic performance of the student upon his or her return to the University; it would not be granted automatically.

Academic Reviews and Appeals

Academic Review

A student's academic progress or standing is evaluated in conformity with Departmental, Divisional, School or Senate regulations governing courses, programs, examinations, and degrees.

Unless prohibited by a specific committee policy, a student may request a review of any academic decision or a re-evaluation of any course component(s), including examinations, subject to the following guidelines.

(NB: Students may seek the advice of the University Ombudsman at any stage in this process)

If the issue pertains to a specific course, the student shall first discuss the issue with the course instructor. This must be done as soon as possible, and no later than one month after the beginning of the next regular term of the University following the academic decision.

If the issue cannot be directly resolved between the faculty member and the student, the student may take the matter to the Dean of the Division in which the course was offered within thirty days of the initial meeting with the faculty member. If the matter does not concern a specific course, the student must appeal directly to the Dean in charge of the Division or School in which he or she is enrolled.

If the Dean decides that the issue has no merit the student may either accept that decision or appeal to the Academic Review Committee.

If the Dean determines that the issue has merit, he or she will proceed, within two weeks, to seek a resolution informally through discussion with the student, the faculty member, and/or the Chair of the Department in question. If the issue cannot be thus resolved by the Dean, he or she may impose a solution. In the case of a dispute over a grade, the Dean may authorize the re-evaluation of any course component(s) by an impartial examiner (Fee: \$55.00, reimbursed if the re-evaluation results in a higher mark). In certain situations, the Dean may recommend that the student appeal to the Academic Review Committee. In the case of a re-evaluation of a course component, the grade assigned by the reviewing examiner

shall become the official grade for that component and the final course grade adjusted accordingly.

In this context, any decision of a Dean may be appealed to the ARC by the student, given clear grounds for such an appeal.

For cases in which the informal resolution process and the intervention of the Dean is inconclusive or there exists a need for a more formal review of an academic matter, Senate has established two committees, the Academic Review Committee (ARC) and the Academic Appeals Committee (AAC) to deal with the formal review of all academic matters. The University Senate delegates to these Committees the authority to render decisions on all academic matters as well as the authority to implement additional procedures consistent with those set out below.

The function of the Academic Review Committee is to hear complaints against any academic decision taken in the University by a faculty member, a Department Chairperson, a Dean or the Vice-Principal, and to adjudicate all infractions of University academic policy referred to it by any member of the University community. The function of the Academic Appeals Committee is to hear appeals against decisions made by the ARC (see below for the specific grounds for appeal). Normally, the decision of the AAC is final and binding on all parties. However, in particularly serious cases, further appeal to the Visitor may be possible (see R.O.R.s, 2.2).

The Academic Review Committee

The Academic Review Committee (ARC) shall consist of five voting members: two faculty members, who shall be members of Senate and chosen by the Senate Nominating Committee, two students who shall be members of Senate and chosen by the Senate Nominating Committee, and one academic officer of the University, (Dean or Vice-Principal) who shall be named by the Chair of Senate (the Principal). Three alternate members shall also be selected by the Senate Nominating Committee; two students and one faculty member. The ARC shall elect annually a chairperson whose name will be communicated to the Secretary of Senate.

Note: For eligibility rules concerning members who may sit on the ARC as well as further procedures regarding the Committee quorum, procedures in committee, documents, onus and standard of proof, please refer to Appendix I, below.

- (i) The Committee year extends from May 1st through April 30th of the following calendar year. The Committee shall remain constituted for the entire year.
- (ii) Faculty members shall serve a term of two years, renewable once, after which they must step down for at least one full year. Student members shall serve a term of one year, renewable once. Senate shall make provisions (through its Nominating Committee) for timely replacement of members whose terms are expiring.
- (iii) The Committee is authorized by Senate to select which alternate members will replace regular members who must leave the Committee before the end of their term or who are unavailable during the summer months.

Powers

The Academic Review Committee shall have the following powers:

- (i) review any academic decision taken by a faculty member, a Department Chairperson, a Dean or the Vice-Principal.

- (ii) review any infraction of University academic policy including all matters governed by Department, Division, School and Senate regulations.
- (iii) review any complaint regarding interference with the University's academic operation.

Note 1: The ARC does not have jurisdiction over the following areas: admission to the University, re-admission, probation and academic standing issues, including "must withdraw" decisions, and scholarship decisions. These areas are the purview of the Academic Standing/Admissions Policy (ASAP) Committee.

Note 2: Before the ARC will accept jurisdiction for decisions concerning grades, there is a separate procedure for the review of marks obtained in final exams and in other components of a course. This procedure must be followed first.

Making a Request to the Committee

The Academic Review Committee will consider a request for review only after:

- (i) the receipt by the Committee Chairperson of a written and signed notice of request filed within thirty days of the time that the most recent academic decision concerning the matter in dispute has been communicated in writing to the student. Requests for review must include: a complete specification of the wrong to be corrected, the specific grounds for the request for review and the remedy sought. In the case of a request to review a general policy or regulation, the written, signed notice may be made at any time. In all cases, requests for review of any academic decision must be initiated before the marks deadline of the semester following the completion of the course in question.
- (ii) before proceeding with a request for review of any matter, the ARC Chairperson will request a written assurance from the Dean and Ombudsman that all reasonable efforts have been made to solve the dispute at an earlier level.
- (iii) Within seven working days of receipt of the notice of request for review, the Chairperson will acknowledge the same in writing to the complainant(s).
- (iv) Within ten working days, the Chairperson shall convene an initial meeting of the ARC and give a five day notice to all parties of the date of the initial meeting.

Disposition of the Committee Decision

- (i) Decisions shall be made by simple vote of the Committee; three positive votes are necessary to carry any decision. The tally of all votes shall be recorded in the minutes.
- (ii) During the course of a review, no changes shall be made to any mark or grade in question, nor to any student's current status, nor to his/her eligibility for a given program.
- (iii) The Academic Review Committee shall render a decision on a review within sixty calendar days of receipt of the request for review.
- (iv) The Chairperson of the Committee will report its decision to the complainant, the defendant, the Chair of Senate (the Principal), and the appropriate Dean within five days of the rendering of the decision.

- (v) If the decision is not taken to appeal (see below), the appropriate Dean will be responsible for the implementation of the final decision. At least thirty days will be allowed for the implementation of the decision by the individual University office involved.

Academic Appeals

The Academic Appeals Committee (AAC) shall consist of three members: one faculty member who is not a member of Senate named by Faculty Council, one student who is not a member of Senate named by the SRC, and one Academic Officer of the Senate (Dean or Vice-Principal) named by the Principal. Two alternate members shall also be named, one faculty member and one student. The regulations for the term of office, length of the Committee year, election of the chairperson, eligibility, extension of term, and replacement of members, shall be the same as those for the ARC (see above).

Where an appeal of the decision of the ARC has been submitted, the Senate shall either:

- (i) receive and accept the report of the ARC
- (ii) receive the report of the ARC and refer the case to the AAC.

In both cases debate on Senate's decision must be held in camera, and any member of Senate who is a party to the case must excuse him- or herself from the discussion. The content of the debate shall be confidential and Senate shall limit itself to discussion of material contained in the report of the ARC and the request for appeal. Members of Senate who are also members of the ARC shall abstain from voting.

Filing an Appeal

- (i) An appeal against a decision of the ARC must be filed with the Chairperson of the AAC within thirty days of the decision rendered by the ARC.
- (ii) The appeal may be from either complainant or defendant but in either case shall be written and signed and state specifically the grounds for appeal, the remedy sought and include all of the documents (written and oral) used by the ARC to achieve its decision.
- (iii) Unless there is compelling need for further clarity, no new documents will be considered by the ACC that were not before the ARC.
- (iv) Before proceeding to hear an appeal, the chair of the AAC will, within seven working days of the request for an appeal, acknowledge the request for appeal, notify both parties and within ten working days convene a meeting of the AAC. Five days notice will be given to both parties of the date of the first meeting of the AAC.

Grounds For Appeal

The Academic Appeals Committee has the power to hear an appeal from a decision of the ARC for the following reasons:

- (i) errors of fact in information used by the ARC which could affect the decision rendered,
- (ii) new evidence not available to a party at the time of the decision of the ARC was made,

- (iii) errors of interpretation of any University academic policy or regulation,
- (iv) serious procedural error,
- (v) action by the ARC beyond its jurisdiction.

Procedures

- (i) The regulations with respect to: procedures in Committee, documents, onus and standard of proof set out in Appendix I for the ARC, will apply mutatis mutandis for the Academic Appeals Committee.
- (ii) The AAC will hear testimony from the Chairperson of the ARC where significant procedural error is alleged as the grounds for appeal.
- (iii) The AAC will have access to all recorded testimony, documents and minutes of the ARC.

Decisions

- (i) Decisions shall be by simple vote of the Committee; at least two positive votes are necessary to carry any decision. The tally of all votes shall be recorded in the minutes.
- (ii) The AAC may decide to return the case to the ARC for further review. Alternatively, it may uphold the decision of the ARC or fashion any other remedy as it sees fit.
- (iii) The AAC shall render a decision on the request for appeal within three months of the request for appeal.
- (iv) The Chair of the AAC will report its decision to the complainant, the defendant, to the Chair of Senate (the Principal) and to the appropriate Dean(s) within five working days of the rendering of the decision.
- (v) The decision of the AAC will be final and binding on all parties.

Appendix I: Rules and Procedures

1. Eligibility.

The eligibility of students, Faculty members, Deans and the Vice-Principal who sit on either the ARC or on the AAC is restricted as follows:

- (i) individual members cannot sit on both Committees,
- (ii) no individual member of either committee can serve if they are involved in the case as plaintiff, defendant or witness,
- (ii) no individual member can serve on either committee who has been found guilty of an academic offence,
- (iv) no individual member can serve on either Committee who is in a position of bias or conflict of interest (financial gain, kinship relation, close personal relationship),
- (v) all student members who serve on either Committee must be in good academic standing in their program at the time they are elected to the Committee concerned.

2. Quorum

A quorum shall consist of two student members and two faculty members and one academic officer of the University (or the alternate). Every effort shall be made to assume that a consistent quorum of members follows each case to its conclusion. The Committee is authorised to extend the terms of members for this

purpose. The Committee shall elect annually a Chairperson whose name will be communicated to the Secretary of Senate. Senate shall make provision for a Committee secretary who will record the minutes of all meetings. The Secretary shall not participate in the discussions and shall not have a vote.

3. Examples of matters that can be reviewed by the ARC:

- (i) all matters of academic integrity after a decision by the appropriate Dean has been rendered,
- (ii) program eligibility, program transfer, program requirements,
- (iii) requirements for the degree,
- (iv) credit for studies elsewhere,
- (v) deferred status for exams or course components,
- (vi) requests for supplemental exams,
- (vii) a mark or a grade in a course, final standing in a course after the procedures for external re-reading of exams or course components have been completed,
- (viii) grading practices after a decision by the appropriate Dean has been rendered,
- (ix) any infraction of Department, Division or Senate regulations,
- (x) any complaint regarding interference with the academic operation of the University.

4. Procedures in Committee

- (i) The Committee shall conduct its meetings in camera.
- (ii) Both complainant and defendant(s) have the right to be accompanied by a representative of their choice; this representative shall be any full-time member of the University community.
- (iii) The University, if it so decides, may appoint a legal advisor to assist the Committee. Such an advisor shall be considered a neutral observer in the proceedings of the Committee and shall not vote.
- (iv) Both complainant and defendant have the right to make representation in the manner decided by the Committee.
- (v) The parties to the dispute shall be interviewed separately by the Committee in the first instance at which time they may make oral representations and refer to the relevant evidence (see documents below). This procedure does not preclude a face-to-face meeting if all parties agree.
- (vi) General minutes shall be taken of the meeting and the testimony of witnesses and of all motions of the Committee. Copies of the minutes will be provided to all parties.
- (vii) All oral testimony given by witnesses will be recorded on audio tapes which will be made available to the complainant and the defendant and to which they may respond in writing within five days of receiving a copy of the tape.
- (viii) All written and oral testimony, evidence and minutes of the Committee are confidential to the Committee and to the parties involved in the dispute. Deliberations of the Committee are confidential to the Committee.

Each Committee shall establish its own *modus operandi*, however, the following sequence is a general guideline:

- (i) introduction of the complainant, defendant, members of the Committee,
- (ii) review of documentation,

- (iii) rulings on documentation or further evidence necessary,
- (iv) statement by the complainant, questions from members of the Committee,
- (v) statement by the defendant, questions from members of the Committee,
- (vi) re-calling of the complainant and defendant for clarification of information only by members of the Committee.

5. Documents

- (i) Copies of all documents submitted by each party will be made available to members of the Committee, to the complainant and to the defendant one week before the hearing date.
- (ii) University records such as transcripts, student files, office correspondence as well as all Departmental, Divisional and Senate regulations are automatically evidence before the Committee.
- (iii) All documents provided by either party will become evidence for the Committee unless one party objects on the grounds that such documents are forged or false or made with malicious intent. Such documents may become evidence before the Committee only after the Committee receives written confirmation of their authenticity by the original author. The Committee reserves the right to accept or reject all documents.
- (iv) The Committee will request written evidence and testimony from all parties to the dispute as well as from the appropriate Dean and from the Ombudsperson.
- (v) The Committee shall reserve the right to invite and receive written and/or oral evidence from any other party, to request and receive any other document it deems may assist in its deliberations and all such evidence shall be made available to the parties in the dispute.
- (vi) In the case of new documents brought to the Committee during the hearing, both parties and all members of the Committee will have the right to review such documents before proceeding with the case.
- (vii) Following the Committee's final decision in the case, all documents, including the written evidence submitted by the parties to the dispute and the taped oral testimony, will be retrieved by the Chair, and together with the minutes, shall be deposited with the Office of the Vice-Principal and shall be made available to the parties in the dispute,
- (viii) The Vice-Principal's assistant will number all documents, arrange them in chronological order and provide for their safe-keeping until such time as a further appeal is sought (see AAC below) or for a period of one year, whichever is applicable.

6. Onus

- i) The onus is on the complainant to demonstrate that the ruling or decision in question is inappropriate or unreasonable. The exception shall be in cases of academic dishonesty where the onus is on the faculty member (or the University) to demonstrate that an academic offence has been committed.
- ii) In cases regarding the waiving of Departmental, Divisional or Senate regulations, where the grounds for such a request are either medical, compassionate or other extenuating circumstances as decided by the Dean of the Division concerned, the onus is on the complainant to demonstrate that following the particular regulation in question was impossible. In such cases,

documents attesting to the status of the student must be provided in a timely manner, must be specific and must demonstrate that such grounds do in fact exist.

7. Standard of Proof

Unlike the standard of proof commonly used in criminal cases and usually known as “proof beyond a reasonable doubt”, the standard of proof to be used by the Committee will be the “balance of probabilities” or “preponderance of evidence”. By this is meant “more likely than not” in the sense that an unbiased observer, having reviewed all the evidence and having heard all sides of the story, should be able to say: “the fair decision in this case is ‘X’ more likely than not”.

In alleged cases of academic dishonesty or in other cases which call into question the very nature and operation of the University, the balance of probabilities, when used as the standard of proof, needs to be at the higher end of the scale and must be based on clear and compelling evidence.

Ombudsman

The major role of the Ombudsman is to receive complaints from members of the University community who believe that they have suffered some form of injustice, particularly of an academic nature. After examining the factual basis of these complaints and determining that all normal avenues of recourse and appeal have been exhausted, the Ombudsman investigates these complaints and facilitates their solution either using existing procedures, both informal and formal, or by recommending changes to the existing procedures. The Office of the Ombudsman operates independently of all other offices in the University and may make recommendations in specific cases or recommendations pertaining to the changing of any rule, policy, regulation or procedure which he/she deems appropriate. The objectives of these recommendations will be either to solve an individual problem or to improve the overall operation of the University. The Ombudsman must investigate all sides of a particular problem, must maintain a neutral stance throughout the investigation and must strive to achieve solutions which are as fair and just as possible given the circumstances involved. At the end of an inquiry, the Ombudsman will explain the nature of the chosen solution to those who initiated the complaint or, where the complaint has been found to be not justified, explain to the individual or groups involved the reasons for not continuing the investigation. From time to time, the Ombudsman may also act as a mediator between individuals or groups of individuals in the University community who have been unable to resolve a conflict, particularly where no procedure exists for the resolution of such matters.

Please see the University website for further information and the complete text of the terms of reference for the Ombudsman.

Selection of Courses

Students are responsible for ensuring that their selection of courses conforms with the general requirements of university programs, the general and academic regulations of the University, and the specific requirements of the specialization of their choice. In planning their annual course choices, students are urged to consult with the appropriate department Chair and Dean.

The programs have been designed to permit the most effective study in a discipline or subject by the majority of students.

Nevertheless, changes may be appropriate for particular students because of specific objectives, background, etc. Students who wish to alter their program must consult the chairperson of the department and the Dean concerned, preferably before registration. It should be noted that constraints are imposed on possible changes in programs by the timetable of courses.

A 90-credit program can normally be completed in 3 years of full-time study. A 120-credit program can normally be completed in 4 years of full-time study.

Confidentiality of Student Information

In conformity with Article 65 of the Quebec legislation concerning access to public documents and confidentiality of personal information, Bishop’s University informs its students that all personal information collected in the course of admission and registration of a student will be kept confidential, except where specific permission is given to release it.

Students are obliged to provide information which is requested by the administrative offices of the University. The University may only request information which is essential to its operation; refusal to provide this information may lead to denial by the University of services to the student.

In signing the application form, all students agree that the information contained in it, and in their student file, may be made available to those administrators charged with management of their academic and financial affairs while they are at Bishop’s University. No information will be released to other persons without express permission of the individual concerned, except in circumstances involving the safety and security of the individual or a breach of the law.

Any student may consult his or her file during regular office hours, and may request that any errors found in the file be corrected. If necessary, a formal request for correction may be made in writing to the Registrar.

Discipline

Students are expected to conduct themselves in all places and at all times in a manner appropriate to members of a university. Failure to do so may result in disciplinary action. In accepting admission to the University, a student is agreeing to abide by, and be subject to, its regulations. The Charter of Student Rights and Responsibilities provides a framework for such a commitment. The University reserves the right to suspend or dismiss any student for misconduct or for serious infractions of university regulations. Such action will result in the loss of course work for the semester in which the suspension or dismissal is imposed.

Matters of discipline are adjudicated by the Committee on Student Conduct which is chaired alternately by the Dean of Student Affairs and the Director of Residences and Conference Services depending on whether the issue is judged to be primarily residential in nature or of a broader import. The committee comprises, in addition, six students representing both on and off campus constituencies. The Committee on Student Conduct is empowered to take note of and to judge matters of student conduct, excluding academic issues referred to it by any member of the University. All recommendations are forwarded to the presiding chairperson for consideration and final decision. Exceptions to this are limited to recommendations for suspension or expulsion from

the University which are forwarded directly to the Principal. In addition, a Joint Disciplinary Council composed of a balanced set of delegates from each of the Bishop's and Champlain College communities is mandated to deal with situations which involve students of both institutions.

Policy on Harassment

Living in a University environment entails respect for the welfare and dignity of others. Harassment of any kind is intolerable, and we share the responsibility of promoting a climate of education, support and understanding. The University has developed policies and procedures for dealing with sexual and other forms of harassment. The Committee administering this policy includes representatives of all constituents of the University; the policy document is posted on the Bishop's website, and can also be obtained from the Principal's Office.

Students' Responsibilities

Students are required to abide by reasonable instructions given orally or in writing by any official of the University authorized to secure compliance with regulations, rules, practices and procedures. They should carry proper University identification (student card) at all times, and be prepared to show it at the request of any individual acting in an official capacity (such as University security officers, police officers or student residence staff).

Students have a responsibility to attend lectures and laboratories and to perform punctually all academic assignments in accordance with the standards prescribed by the departments concerned and announced by the instructors at the beginning of the year. Failure to fulfil these requirements may lead to debarment from examinations. Protracted absence from the University may involve debarment from courses.

Students are required to return promptly after holidays, and are requested not to make travel plans which will interfere with registration or examination schedules.

Professors' Responsibilities

Before the Add/Drop deadline of each semester, teaching staff will provide in writing to students in each of their courses a course outline containing:

1. a list of the required textbooks, readings (or material) to be covered in the course;
2. a general outline of the topics to be covered;
3. a schedule of term assignments and tests;
4. a description of the evaluation procedures to be used.

Academic staff are required to establish and post office hours during which they are available for individual consultation with students.

The document "Policies regarding responsibilities of academic staff to students" is posted on the Bishop's website, and is also available from the Registrar's Office.

Students' Official Address

In order to ensure timely and efficient communication with students, the University will use the following as the "official address" for students:

- a) during the regular (September through April) academic year, the student's on-campus mailbox;
- b) from May through August, the student's home address on file in the Records Office, unless the student has provided a temporary address for this period by informing the Records Office directly.
- c) at any time, the Bishop's University e-mail address will be deemed to be the "official" one for communications from the University to students, and students are responsible for ensuring that they are able to receive these communications.
- d) students are responsible for checking their campus mailbox and Bishop's e-mail at least once each week during the academic semester while in attendance at the University.

REGULATIONS FOR BACHELOR'S DEGREES

General Academic Requirements

Bachelor of Arts, Sciences,

Business Administration, Bachelor of Business and Science:

A degree may be earned by means of one of the following kinds of programs selected from among those offered in this Calendar:

1. Honours in an academic discipline. Honours programs entail a very high degree of concentration in a subject and require a high standard of academic performance. These programs are especially suitable for those who plan to proceed to graduate study. A major or minor in a second discipline may be combined with honours.
2. A major in an academic discipline or interdisciplinary subject. Major programs require less concentration in a subject than honours programs and provide greater scope in the selection of optional subjects. A major in one discipline may be combined with a minor in a second discipline, or with a second major where the requirements of both can be satisfied.
3. Honours or major in a group of disciplines encompassed by a division of the University (e.g. Natural Sciences). This type of program is designed to permit maximum flexibility of study within a division while ensuring, at the same time, a useful level of concentration in one or two disciplines. A divisional major may be combined with a minor, or in some cases a major, in a discipline outside of that division.
4. Minors in two academic disciplines. This type of program involves the least concentration in any one subject. Degrees consisting of double or triple minors will be granted as Bachelor of Arts degrees. To graduate with a double or triple minor, students must normally complete all the requirements for each minor program as stipulated in the Academic Calendar. However, in cases where there are common course requirements, for a double minor, a maximum of 6 credits may be double-counted (i.e. applied to both minors); for a triple minor a maximum of 9 credits may be double-counted (i.e. applied jointly to the three minors).

In each case, courses must be completed in addition to those required by the selected honours, major or minor combination in order to fill the minimum credit requirement indicated in a letter of

admission or in a letter indicating a credit requirement change necessitated by a program change.

Successful completion of a program is determined by the Department and the Dean, in accordance with the Academic Calendar regulations in effect either when the student enters a program or in the student's graduating year.

Students with a failing cumulative average (ie. below 50%) will not be eligible to graduate from the University.

Additional requirements:

1. Three credits are added to each student's academic program to meet the EWP 099 writing proficiency requirement, ie. 90 credit programs are designated as 93 credits, 120 as 123. Please refer to the Writing Proficiency program section of this calendar for details. All students must satisfy this requirement in order to be eligible to graduate.
2. The credit requirement indicated in a letter of admission, or in a letter indicating a credit requirement change necessitated by a program change, is the minimum requirement. A completed program must include all required courses/labs of the selected honours/major/minor program(s) as described in the relevant Academic Calendar, which may exceed the minimum.
3. In the event of an academic program change, the student must notify the Records Office by completing and returning the correct form. The Academic Calendar in effect at the time of the program change will determine the program requirements.
4. A student may not be required to follow more than 12 course credits, excluding lab credits, in any one discipline during the first 30-credit program year. This will permit the choice of a major or honours program from at least two fields of study.
5. A student transferring to Bishop's from another college or university must successfully complete a minimum of at least 30 earned credits at Bishop's, plus program requirements as determined by the department(s) concerned, in order to be eligible for a Bishop's degree. This total must normally include at least one half of the total number of credits needed to satisfy the requirements of the chosen honours/major/minor program(s).
6. 50% of degree credits must be obtained from Bishop's University (i.e. 120 credit program = 60 credits at Bishop's University, 90 credit program = 45 credits at Bishop's University). A recognized student exchange counts as credits completed at Bishop's University.
7. Following admission to Bishop's University, a student may normally complete no more than two semesters, or attempt (pass or fail) more than 30 credits, not including laboratory credits, at other universities during the completion of a Bishop's degree.
8. At least 21 of the final 30 credits of a Bishop's degree program must be completed at Bishop's, leaving a maximum of 9 credits which may be completed elsewhere on a letter of permission. Exception: students participating in a recognized Bishop's Exchange program.

Under exceptional circumstances, a total of 12 credits could be taken elsewhere on a letter of permission approved by the Academic Standing Committee, through the appropriate Dean.

General Academic Requirements

Bachelor of Education

1. A B.Ed. degree may be earned by the successful completion of the approved courses and the practica required by the degree program.
2. Following admission to the B.Ed. program, all course requirements for the program must be completed at Bishop's.
3. Upon successful completion of the Bachelor of Education, graduates are recommended to the Ministère de l'Éducation du Loisir et du Sport of the province of Quebec for the appropriate "brevet d'enseignement".

Second Bachelor Degrees

A second Bachelor's degree is possible for those already possessing a Bachelor's degree.

1. The second degree program shall require the completion at Bishop's of at least 30 credits plus such additional credits as may be required to meet program requirements. Completion of courses elsewhere on a letter of permission is normally not permitted. However, candidates for a second Bachelor's degree who wish to participate in a recognized Bishop's University exchange program may be permitted to do so at the discretion of the appropriate Divisional Dean.
2. At least one half of the total number of credits needed to satisfy the requirements of the chosen honours/major/minor concentration must normally be completed at Bishop's.
Candidates for a second Bachelor's degree may not register in a divisional major program or in a program of two or more minors.
4. Candidates holding a pass Bachelor's degree from Bishop's or elsewhere, may be admitted as candidates for the Honours Bachelor's degree in the same area of concentration as that of the first degree, or in another area of concentration.
5. Candidates for second Bachelor's degrees are not eligible for scholarship consideration in the Bishop's University Scholarship program.

Selection of Courses

1. Students should plan their programs each semester so as to include courses which are prerequisites for courses to be taken in subsequent semesters/years. Some courses are given only in alternate years. Certain combinations of courses may be rendered impossible by the arrangement of the timetable.
2. A course for which credit is earned in any semester may be repeated once to improve the grade. No additional credit will be awarded. The initial course registration and mark will remain on the student's academic transcript, with the notation "RNC — repeat no credit" appearing beside it. The mark received in the second registration for the course will be used in the calculation of the student's average (including cumulative average) and credits awarded, regardless of whether it is the higher or lower mark. Repeated courses will not retroactively affect academic standing.
3. A student who has failed a course twice will be allowed to reregister for that course only with the instructor's permission,

after a review of the student's program by the department concerned. Appeals to the decision will be processed through the regular appeals procedure. The present double failure rule as it applies to courses offered by the Business Division and Economics department remains in force. (See Programs and Courses, Business Administration)

4. Students who contemplate entering graduate school upon graduation should consult with the graduate school in order to ensure that they are meeting the prerequisites of the graduate program they propose to enter.

Credit for Studies Completed Elsewhere

Transfer students:

Bachelor of Education

Students may be eligible for advanced credits for the Major or minor in education for courses which meet the teachable subject course requirements and/or for courses which have educational content and which meet program requirements.

Bachelor of Arts, Sciences, Business Administration, Business and Science

1. Students admitted to Bishop's following completion of a minimum of one semester at another university or college may be eligible for advanced credit granted at the discretion of the appropriate Divisional Dean. The student must present complete official transcripts and course descriptions for evaluation. Transfer credit is awarded subject to the regulations governing credit for studies completed elsewhere and subject to further review should the student change programs.
2. Students from completed CAAT (Ontario) programs in General Arts and Sciences or Business Administration may be eligible for advance credit against a four year Bishop's program, granted at the discretion of the appropriate Divisional Dean. Bilateral agreements are in place with specific CAAT programs regarding transfer credit. Please consult the Admissions Office for detailed information. Although exemption may be possible, no credit will be awarded for incomplete programs.
3. Permanent resident students who have completed studies outside North America must obtain an "Attestation des équivalences" for those studies from the Quebec Ministry of Immigration. No evaluation will be made without the Attestation.
4. Students must successfully complete a minimum of at least 30 earned credits at Bishop's, plus requirements of the program as determined by the department(s) concerned, in order to be eligible for a Bishop's degree. This total must normally include at least one half of the total number of credits needed to satisfy the requirements of the chosen honours/major/minor program(s).
5. 50% of degree credits must be obtained from Bishop's University (i.e. 120 credit program = 60 credits at Bishop's University, 90 credit program = 45 credits at Bishop's University). A recognized student exchange counts as credits completed at Bishop's University.
6. Teachers holding the Quebec Class II Permanent Diploma, or letter of equivalent standing, may be granted 30 advance credits in a B.A. program.

7. Teachers holding Quebec Interim Class II Certificates, and teachers holding qualifications from other provinces, may receive credit for certain courses on the basis of their individual records.
8. Each university retains the right to accept or to refuse freely the registration of a student from another university.

Certificate programs

A maximum of 9 credits completed at another university may be transferred to a Certificate program at Bishop's.

Bishop's students:

1. Following admission to Bishop's University, a student may normally complete no more than two semesters, or attempt (pass or fail) more than 30 credits, not including laboratory credits, at other universities during the completion of a Bishop's degree. Exception: Students in the Graduate Studies programs in Education may only complete a maximum of 9 credits at another recognized institution.

At least 21 of the final 30 credits of a Bishop's degree must be completed at Bishop's, leaving a maximum of 9 credits which may be completed elsewhere on a letter of permission. Exception: students participating in a recognized Bishop's exchange program.

Under exceptional circumstances, a total of 12 credits could be taken elsewhere on a letter of permission approved by the appropriate Dean.

- a) Students wishing to follow studies in another institution for credit at Bishop's must be enrolled as degree candidates at Bishop's.
- b) Advance permission and advance approval of all aspects of the study must be secured on the appropriate form from the Chairperson of the department in which they are concentrating their studies and from the appropriate Divisional Dean. The credit transfer request form is available from the Records Office and, once completed, is placed in the student's file.
- c) It is the responsibility of the student to ensure that an official copy of the transcript for the course(s) completed at another university is forwarded directly to the Records Office at Bishop's upon completion of the course(s). Transcripts will automatically be sent for students studying at other Quebec universities who registered through the CREPUQ website for Quebec inter-university credit transfer.
- d) Courses successfully completed elsewhere may only be applied as credit towards a Bishop's University degree. The grades obtained in such course(s) are not included in the calculation of a student's cumulative average and can not affect a student's academic standing.
- e) Any student who has been required to withdraw from the University may not complete courses elsewhere on a letter of permission.
- f) Courses completed elsewhere without prior permission being obtained through the appropriate procedures outlined in this Calendar normally will not be accepted for credit towards a degree at Bishop's University.

- g) Students returning to Bishop's following the completion of studies at another institution on a letter of permission must provide the Admissions Office with:
 - i) a written statement of their intention to return to the University prior to the beginning of the semester in which they intend to return.
 - ii) an official transcript of the results of these studies.
 - h) The academic regulations of the University, including those concerning probation and must withdraw status, apply to all Bishop's students. This includes those studying elsewhere on a letter of permission as well as those studying on the Bishop's campus.
2. Under special reciprocal agreements concluded between Bishop's University and all other Quebec universities, students in a degree program at Bishop's wishing to enroll in courses at another Quebec institution (to a maximum of 30 credits), must initiate their request through CREPUQ's website for Quebec inter-university credit transfer. Credits so earned will be recognized towards a degree at Bishop's if the courses/credits are approved by the academic department or division concerned.
- Students wishing to profit from this reciprocal agreement must:
- a) ensure that the Bishop's timetable permits the desired external courses to be taken;
 - b) obtain the Preliminary Credit Transfer Request Form from the Records Office. This form must be authorized by the Departmental Chairperson, appropriate Dean, and the Registrar at Bishop's. Before a student's request for credit transfer is processed, it is necessary that any outstanding accounts receivable be paid, as well as the tuition for the courses to be taken at another Quebec university.
 - c) enter the request via the internet through the CREPUQ website (www.crepuq.qc.ca) by clicking on the button Autorisation d'études hors établissement. All required information must be entered. The system will process the request automatically, through the designated department advisors and Registrar's Offices at both institutions.
3. Each university retains the right to accept or to refuse freely the registration of a student from another university.

Interrupted Studies

Candidates for an undergraduate degree who have for any reason allowed twelve months or more to elapse without earning any credits at Bishop's University towards their degree must reapply for admission to the University. If permitted to resume their studies, they will be required to adhere to the calendar regulations in effect at the time the degree program is resumed.

If studies have been interrupted for 10 years or more, the assessment of credits to be applied to the student's current program will be made by the Dean in consultation with the Department. The Dean's decision may be appealed to the Academic Standing Committee. General elective courses will not normally be considered as subject to decay of credits.

Writing Proficiency Program

All students enrolled in B.A., B.Sc., B.B.A., B.C.S. or B.Ed. programs are required to satisfy the writing proficiency requirement by passing either the course EWP 099 or the EWP 099 exemption credit examination before graduation. Please refer to the Writing Proficiency section under "Programs and Courses" for details.

Applying to Graduate

1. Candidates for degrees and certificates who expect to complete the requirements for a degree in a particular year must submit an Application to Graduate, along with the \$65 graduation fee, to the Records Office prior to March 1st for the Spring Convocation. The \$65 graduation fee covers charges related to the production and mailing of diplomas and is assessed whether or not a student plans to attend the Convocation ceremony.
2. Students who complete their degree requirements in the Summer session or the Fall semester can request a letter from the Registrar certifying that their degree requirements have been satisfied, and that their diploma will be granted at the next Convocation.
3. Students who achieve degrees with first class (80% or over) academic standing have the notation "with distinction" recorded on their transcripts and in the Convocation program. Students should check the individual Division or School sections in this Calendar for an explanation of the method used to calculate first class degrees.
4. Students with a failing cumulative average (i.e. below 50%) will not be eligible to graduate from the University. (see Additional Graduation Requirement in Business Administration.)

Requirements for the Bachelor of Arts Degree of the Thomas More Institute

Students of the Thomas More Institute who have a Quebec collegial diploma (D.E.C.), are required to complete successfully 15 university level courses (90 credits), as specified in the information booklet of the institute. Students 23 years of age or over who do not have a collegial diploma must complete 3 university threshold courses, in addition to the above requirement, for a total of 18 university-level courses (108 credits).

Details of the program and courses may be obtained from:

Thomas More Institute
 3405 Atwater Avenue
 Montreal, Quebec, H3H 1Y2
 Telephone: 514-935-9585

REGULATIONS FOR CERTIFICATE PROGRAMS

Certificates may be completed on a full-time or a part-time basis.

Admission requirements

Students must make a formal application for admission to Certificate programs on the special form for this purpose available at the Admission's Office.

Applicants for admission to Certificate programs must fulfill the same admission requirements as applicants to a Bachelor's degree in the same discipline. (see Admission requirements — Degree Studies).

Academic standing — probation and must withdraw

Students in the Certificate programs must meet the Academic Standing criteria for part-time students as outlined in the Academic Calendar. Students in the Certificate in Business Administration must also fulfill the requirements for maintaining good standing in Business.

Transfer between Certificate and Degree programs

Students may make application for transfer from a Certificate to a Degree OR from a Degree to a Certificate program in the same or another discipline. The regulations governing Academic Program Changes will apply.

A maximum of 21 credits may normally be transferred from a Degree to a Certificate program.

A maximum of 30 credits may normally be transferred from a Certificate to a Degree program. If a student has graduated from a Certificate program, the credits earned in the Certificate may not be used to satisfy the requirements of a minor in the same discipline.

Transfer of credit to Certificate programs

A maximum of 9 credits which have not been counted towards any other degree or certificate program at any other university, may be transferred to a Certificate program at Bishop's, subject to the regulations governing transfer of credit from other institutions (see Credit for Studies Completed Elsewhere).

Completion of a Certificate program following completion of a Bachelor's degree

Students who have completed a Bachelor's degree at Bishop's University may be admitted to a Bishop's Certificate program in a different area of study. All 30 credits required for the Certificate must be completed at Bishop's.

GENERAL ACADEMIC REGULATIONS

1. Full-time or part-time status for each student in each semester will be determined by the student's course registration following the processing of all added and/or dropped courses. Withdrawal with permission from courses(s) does not alter this status.
2. The normal registration for a full-time student in any semester is 15 course credits; the minimum number is 12 credits, including lab credits. Students following fewer than 12 credits including lab credits per semester normally are considered part-time students.

Exception: A student requiring fewer than 12 credits to graduate in his or her final semester may petition the Registrar in writing to retain full-time status with less than 12 credits. Students in this situation will be required to pay the full student services fee.
3. The maximum course load for a full-time student is normally 18 credits per semester not including lab credits. (Both ESL courses and EWP 099 are included in the credit counts.) Subject to the general regulations set forth in the Calendar, students may be permitted to take an additional course (or courses) in excess of the requirements for a given semester with the written permission of the appropriate Dean. Students shall then have two choices:
 - a) they may take the additional course as a regular subject for credit; or
 - b) they may "audit" the additional course with the permission of the instructor, and participate in class discussions and activities, but may not write the examinations or receive credit for the course. Audit courses are subject to the normal fee structure of the University and are charged in the same manner as credit courses.

Note: In both cases (a) and (b), the student must register for the course in the usual manner and adhere to the applicable deadline dates for adding and dropping courses. The course entry will appear on the student's record if the course is not dropped by the deadline date.
4. A student may not be required to follow more than 12 course credits, excluding lab credits, in any one discipline during their first 30 credit program year. This will enable them to choose a major or honours program from at least two fields of study.
5. Students who receive permission to register as special full-time undergraduate or graduate (SFU, SPG or SPT) students may make such a registration for a maximum of two consecutive semesters. (see Academic Program Changes) Such students must make a choice of, and be formally admitted to, an alternate degree program by the deadline for registration (normally the Add/Drop deadline) of the third semester. Students who fail to do so will not be permitted to register on a full-time basis in that semester.
6. Part-time students who have been formally admitted to a degree program at Bishop's wishing to change to full-time status must make a written statement of their intention to make

such a change to the Admissions Office prior to the beginning of the semester in which they wish to register full-time. This includes those students who may have attended the University on a full-time basis in a previous semester.

7. Full-time students wishing to change to part-time status must make a written statement of their intention to make such a change to the Admissions Office prior to the beginning of the semester in which they wish to register part-time.
8. Full-time students who do not register at the University for one semester or more for any reason (including those students studying elsewhere on a letter of permission) must make a written statement of their intention to return to the University to the Admissions Office prior to the beginning of the semester in which they intend to return.
9. Students in an undergraduate degree program who do not register at the University for 12 months or more must reapply for admission to the University (see Interrupted Studies or Academic Standing).
10. A university course taken by a student in order to fulfil the minimum requirements of a collegial program may reduce the specific requirements in a university program by that number of credits. It will not reduce the total number of credits required at the university level for a degree.
11. A course for which credit is earned in any semester may be repeated once to improve the grade. No additional credit will be awarded. The initial course registration and mark will remain on the student's academic transcript, with the notation "RNC — repeat no credit" appearing beside it. The mark received in the second registration for the course will be used in the calculation of the student's average (including cumulative average) and credits awarded, regardless of whether it is the higher or lower mark. Repeated courses will not retroactively affect academic standing.
12. A student who has failed a course twice will be allowed to register for that course only with the instructor's permission, after a review of the student's program by the department concerned. Appeals to the decision will be processed through the regular appeals procedure. The present double failure rule as it applies to courses offered by the Business Division and Economics department remains in force.

Language of Instruction

The language of instruction of the institution is in English, and an English Writing Proficiency test is required for graduation. Nonetheless, students have the option to submit individual written work in either English or French, except where a knowledge or competency in a language is an object of the course. Students who wish to submit work in French must notify their instructor by the ADD/DROP date so that, if necessary, special arrangements can be made for the evaluation of their work.

Application of the extra degree credit courses to a student's program:

1. ESL courses may be recorded on the academic transcript either as "EXT" (extra degree credit), or as credit courses.
2. Extra degree credit ESL courses (ESL 070, 071, 076, 080, 081, 082, 083, 084, 085) are not included in the calculation of a student's academic or cumulative average.
3. Both ESL and EWP 099 are included in the credit count to determine a student's full-time or part-time status. They are also included in the maximum 15 credit count for students on academic probation.

EWP 099 is not included in the maximum 12 credit count for students who are placed on restrict status by the Writing Proficiency program. Extra degree credit ESL courses are not included in the 30 credit minimum required for scholarship students.

Spring and Summer Registration: Bishop's and Elsewhere

1. A student is not normally allowed to pursue more than 15 credits total in Spring and Summer School at Bishop's University (a maximum of 9 credits in any one session) OR 12 credits in summer courses at another institution. In exceptional cases, students may petition the appropriate Dean for permission to enroll in up to 18 credits in the Bishop's Summer School.
2. Courses completed elsewhere during the summer session must comply with the regulations listed under "Credit for Studies Completed Elsewhere."
3. 3 and 6-credit summer courses can be considered for transfer credit, subject to regular departmental approval, regardless of the course interval in which the course is offered.

COURSE CHANGES/ COURSE WITHDRAWALS

Adding or Dropping Courses

1. The deadline date for dropping and adding one-semester courses, including course section changes (and changes from credit to audit status or vice versa) is normally approximately 10 days from the first day of class (see Sessional Dates).
2. Course Adds and Drops are accepted provisionally until it can be verified that the change(s) comply with any restrictions required by the student's academic or financial situation. Students will be informed as quickly as possible if a problem exists.
3. Students will be billed or refunded appropriately following the Add/Drop deadline should fees need to be adjusted.
4. Full-time or part-time status for each student in each semester will be determined by the student's course registration following the processing of all added and/or dropped courses.

Withdrawing with Permission from Courses

1. The deadline date for withdrawing with permission ("WP") from one-semester courses is normally approximately seven weeks after the beginning of the term. For full-year courses,

the deadline date is the same as the deadline date for dropping or adding winter semester courses.

2. Fees will not be refunded for "WP" courses.
3. A student's full-time or part-time status in a semester will not be altered by "WP" courses.

General Information

1. Summer School deadline dates are determined proportionately according to contact hours. (see Sessional Dates)
2. The onus for notifying the Registrar's Office of withdrawal from the University and for completing the necessary forms rests solely with the student. Simply ceasing to attend classes or labs, even when the instructor is informed, does not constitute withdrawal and will result in a failing grade in the course as well as possible financial penalties. Students who leave the University without completing a withdrawal form will have each of the applicable courses recorded as a zero and will not be eligible for any refund of fees. Those students holding scholarships must be responsible for meeting their obligation in returning or repaying all funds received for that semester or that year.
3. Advance course registrations may be done via the Internet, using Bishop's University Registration Navigator, for degree candidates with a valid personal identification number (PIN). At the start of the semester, printed forms for adding, dropping or changing course sections, and withdrawing with permission, are available at the Records Office, McGreer 225, and must be returned to that office by the appropriate deadline dates.

One form of each type is permitted per student, each allowing several revisions. Courses involved must be clearly indicated, giving course code, section and credit value. Each change must have the approval of the professor concerned and the appropriate departmental chairperson.

4. Students will not normally be permitted to add, drop, or withdraw with permission from courses after the stated deadlines unless permission to do so is obtained from the appropriate Dean.
5. Students will not be permitted to withdraw from the University (WU) after the WP deadline without permission from the appropriate Dean. The student may petition the Dean for this permission in exceptional cases only.

ACADEMIC PROGRAM CHANGES

Business Division

To be eligible for transfer into a B.B.A. or B.A. major Business program from a non-Business program, students must have successfully completed at least 30 credits at Bishop's and have achieved a minimum average of 65% based on all courses attempted. Students will also be required to meet with the Dean of Business for an interview. The number of student transfers is determined according to final enrolment figures and the quota for the Division's maximum enrolment.

Any student who twice receives a failing grade in a course offered by the Business Division will not be permitted to repeat the course again (see Regulations — Business programs). If this is a business course that is required in order to complete a B.B.A. or a B.A. major Business, the student will not be eligible to transfer to either of these programs.

Humanities and Natural Sciences Divisions

Students may normally transfer into a program in the Divisions of Humanities or Natural Sciences, or their Departments, with a minimum cumulative average of at least 60% on all courses attempted at Bishop's.

Students with an average below 60% may be considered for registration in some courses in the proposed Division (Department) in order to allow them to show their potential for studies in that Division (Department). Such students will be classified as special full-time undergraduate (SFU) students.

Social Sciences Division

Students may normally transfer into a program in the Division of Social Sciences or between programs within the Division provided they have a minimum cumulative average of 65% on at least 24 course credits completed at Bishop's, or, provided they have demonstrated an aptitude for the program by achieving an average of 65% in all program courses attempted (minimum of 12 credits). For the purpose of this regulation, the cumulative average and course averages used will be those existing at the time the program change request is made.

School of Education

A student must obtain the formal permission of the School of Education to add a Major Educational Studies – Elementary, or Double Major in Educational and a teaching discipline— Secondary. Students will be admitted to these programs at the discretion of the School of Education.

General Information

1. Students must normally have completed a minimum of one semester at the University before requesting a transfer.
2. In the event of an academic program change, the student must notify the Records Office by completing and returning the correct form with the appropriate signatures. The Academic Calendar in effect at the time of the program change will determine the program requirements. Application for program change must be made on the appropriate form available at the Records Office and be approved by the appropriate Dean and department Chair.
3. Program changes may necessitate re-evaluation of minimums and total credit requirements. A completed program must include all required courses/labs of the selected honours/major/minor program(s) as described in the appropriate Academic Calendar and in the letter indicating credit requirement changes.
4. Students who are permitted to register as special full-time undergraduate (SFU, SPG or SPT) students may make such a registration for a maximum of two consecutive semesters.

Such students must make a choice of, and be admitted to, an alternate degree program by the deadline for registration (normally the Add/Drop deadline) of the third semester. Students who fail to do so will not be permitted to register on a full-time basis in that semester.

5. The University realizes that there will be students who cannot continue their studies at Bishop's University as a result of their dismissal from one program and/or their ineligibility for transfer into any other program in the University.

EXAMINATIONS

Regular Examinations

1. Final examinations are held in December (for one-semester courses only), and in April. Other examinations may be held as required. Regular-load day courses (sections 01-04 inclusive) are normally scheduled during the day. Regular load evening courses (sections 05) may be scheduled during the day or evening. Continuing Education courses (sections 06-09) are normally scheduled on the evening the class is held.
2. Every instructor shall, in consultation with the students concerned, determine the procedures by which the final course grade will be arrived at for each course in his or her charge. These procedures shall be filed in the Vice-Principal's Office within the first two weeks of the course. The appropriate documents are open for examination by any registered student after being filed in the Vice-Principal's Office.
3. Department chairpersons, in consultation with other members of the department and the students involved, may be permitted to reschedule examinations in the courses offered by the department without having to obtain the written consent of all students registered in the courses, providing that 2/3 of the students agree and that the rescheduling would not introduce any further conflicts in the examination schedule.
4. Examinations (other than final examinations) and tests can only be set during the formal working hours of the University, namely Monday through Friday from 8:30 a.m. to 6:00 p.m. Evening classes, however, will be allowed to set examinations during their regular class time. Students shall not be required to miss classes in order to write a test, nor shall students be scheduled to write two tests at once. Should either of these two situations arise, the professors and students involved will take immediate steps to remedy the situation to the satisfaction of the students' Academic Dean. Tests outside of normal working hours, or in the case of evening classes, outside of regular class time, will require signatures of all students registered in the course.
5. No mid-term examinations totalling more than 10% of the final grade may be held during the last two weeks of lectures, with the exception of lab tests of 30% of the grade in lab courses of one credit.
6. Examinations in laboratory courses of one credit must take place on or before the last laboratory of the regular term and will not be scheduled in the final examination period.
7. Students writing final examinations in the exam hall must present their Bishop's ID card to prove identity; otherwise the student may be barred from the exam hall.

Guidelines for Examination Invigilators

Identification: Students are required to identify themselves by displaying their Bishop's student card on their desk throughout the exam, and by initialling their name on the class list.

Students may not enter the exam room after the first half-hour of the exam period. Students may not leave the exam room before one-half hour has passed.

Authority: The invigilator has the authority to dismiss from the examination room any student without proper identification. The invigilator may ask a student to leave an examination if he/she has reasonable grounds to believe that a student is breaking or has broken, or is attempting to break a University exam regulation, e.g. cheating, impersonation, improper use of exam materials, or attempting to communicate with or convey information to other students in any way. The invigilator also has the authority to dismiss from the examination any student whose behaviour could cause a disturbance or could constitute a threat to the safety or security of others.

All such instances must be reported to the instructor of the course (if this is not the invigilator), and to the Dean of the Division to which the student belongs, using a form designed for this purpose and available from the Records Office

Instructions: At the start of the exam, the invigilator will refer to the Examination Regulations for Students (printed on the front of the exam books), and require the students to sign that they have understood them.

Presence: The invigilator must ensure that the examination room is not left unattended at any time during the examination. If possible, more than one invigilator should be present. If this is not possible, arrangements should be made for a regular check by a person able to conduct students to the washroom, convey messages, etc.

Illness or Emergency: If a student is unable to continue writing an examination due to severe stress or illness, the invigilator may allow the student to leave the exam room. The invigilator should make a note of the student's name and number and the circumstances, and report these to the Dean of the Division to which the student belongs.

Disruption: In the event of an emergency evacuation during an examination, the invigilator will instruct students to close their exam books and leave all materials on the desk before leaving the building. If the alarm is of short duration, the exam can be continued; otherwise students should be advised that the exam will be re-scheduled. In the event of a power failure, students will close all materials but remain in the room until it is determined whether or not the exam can be continued. If the exam resumes, the exam period should be extended to compensate for the lost time.

In the event of a major disruption (for example fire, flood, or a bomb threat), the exam would be terminated and rescheduled.

Invigilators may wish to carry a cell phone in case of emergency during the exam period.

Rereading of Submitted Work or Examinations

In cases where the rereading of sessional examinations, supplemental examinations or papers is requested, the following procedure will be followed:

1. Only individual course components constituting at least one-third of a final grade in a course can be reread.
2. Written application for the rereading of examinations shall be made to the Dean no later than one month after the beginning of the next regular term of the University. Before an examination paper is reread by an external examiner, it must have been reread by the course instructor. The fee for rereading of examinations by external examiners is \$35 per course.
3. The appointment of the external examiner shall be approved by the departmental chairperson and the Dean. In the case where the departmental chairperson is the original examiner, then another departmental member shall act in the appointment of the external examiner. Where the Dean is the original examiner, then the appointment of the external examiner shall be made by the departmental chairperson and one other member of the department.
4. The external examiner shall be provided with:
 - a) all pertinent course materials including objectives of the course, outline of topics, distribution of marks, texts, case materials, reading lists, etc.
 - b) a copy of the examination paper or essay, without the grade assigned to individual questions, or to the paper as a whole, by the original marker.
5. The grade assigned by the external examiner, whether lower or higher than the original examiner's grade, shall be the grade recorded for that component of the course.
If, as a result of the rereading of an examination, the student's mark is raised to at least a pass, the \$35 will be refunded by the University.

Supplemental Examinations

1. The right to sit for a supplemental examination will be granted only at the discretion of the instructor.
2. A course passed after a supplemental examination shall be recorded as 50%, and a failing grade will be recorded as F.
3. In order to qualify to write a supplemental examination in any course, a student must obtain a final grade of at least 45% in that course, with the exception of science courses which require a final grade of at least 35%.
4. The supplemental examination shall be given not later than the last day of the semester immediately following the original examination.
5. The supplemental examination shall be arranged through the Records Office, using the appropriate form, in consultation with the instructor.
6. The fee to sit for a supplemental examination is \$25 if written on campus, or \$75 if written off campus.
7. The weight carried by a supplemental examination shall be that assigned to the final examination in that course, unless it is specified otherwise by the instructor in the course grading scheme submitted to the Office of the Vice-Principal.

8. In all cases, application forms to attempt supplemental examinations must be completed and returned to the Records Office, accompanied by the appropriate fee (see Fees, Miscellaneous) prior to the supplemental examination being written.
9. Supplemental examinations which would change the student's academic status (that is, from "must withdraw" to "on academic probation", or to remove "on academic probation" from the student's record) must be written by the add/drop deadline in order to change the status for that semester. Supplementals written following that date will change the status for the following semester.

Deferred Marks/Deferred Examinations

1. A student may be granted the privilege of a deferred final mark for a course, either by writing a deferred examination, or by satisfying other written or oral requirements for the determination of the course mark on a deferred basis. The onus is on the student to petition the appropriate Dean for granting of deferred status in any course.
2. Normally, deferred status shall be requested in advance of the scheduled examination or deadline for other course requirements. However, should this not be possible, there will be a 10-day time limit after the date of the scheduled examination, or after the due date for the course requirement, for notification in writing to the Dean by the student of a request for deferred status.

Note: faculty members do not have the responsibility of requesting deferred exams or deadlines on behalf of students, nor do they have the authority to grant such status.

3. With respect to the documents which are to form the grounds for the request for deferred status, there will be a time limit of 30 days after the date of the scheduled examination, or the deadline for the course requirement, for receipt by the Dean of the official documents. Grounds for deferral may include medical, compassionate or such other grounds as may be approved by the appropriate Dean. Where the request is based on medical grounds, the documentation submitted from a physician or a hospital must include specific reasons to account for the absence of the student, and indicate that the student was incapable of attempting the examination or other work on the date(s) in question. The onus is on the student to supply all of the necessary documentation to the Dean.
4. Deferred final marks shall normally be submitted within thirty (30) days of the original deadline for the submission of marks for the course in question. The onus is on the student to contact the faculty member(s) to arrange for the completing of deferred exams or other course requirements. If no mark is received, a grade of "0" will be assigned to the course or course component in question. Final authority for the granting of deferred status, and any changes to this status, rests with the Dean.

General Regulations

1. Final responsibility for grades assigned to any course work or examination rests with the professor or instructor teaching the course.

2. Application for aegrotat standing: a student unable to attempt a final examination or some other requirement for a course, for a valid medical reason, may petition for credit in that course on the basis of satisfactory completion of the remaining course requirements. Such a petition must be accompanied by a statement from a physician and shall be ruled upon by the appropriate Dean.
3. Late submission of grades will not be accepted unless deferment has been granted on medical or compassionate grounds. Deferment or the correction of errors will be the only reason for change of grades.
4. A mark on a transcript shall not be changed after the last day of the semester immediately following the semester in which the grade was achieved.
5. A department may set a comprehensive examination in its honours program at the end of the final semester.
6. Cases not covered by the above regulations may be referred by the student to the appropriate Dean.
7. Honours theses are to be evaluated according to a collegial principle. Specifically, a minimum of three members of a department, or two if the department has only two members, shall evaluate the thesis, their evaluations having equal weight.

Grading System for Undergraduate Studies

Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Bachelor of Business and Science, Bachelor of Education, Special Nondegree Status

Passing grade.....	50%–100%; P (pass)
Failing grade.....	0%–49%; F (failure)
80%–100%	(equivalent to A)
70%–79%	(equivalent to B)
60%–69%	(equivalent to C)
50%–59%	(equivalent to D)
0%–49%	Failure (F)

The notation “Academic Honour Roll” appears on the transcript of a full-time student who maintains an average of 80–100% for the complete academic year (Fall-Winter semesters).

Independent Study Courses

In addition to conventional lecture and seminar courses in which study is directed mainly on a group basis, some departments offer independent study courses which employ individual tutorials as a format. These courses provide opportunities for responsible students of proven overall academic ability to pursue topics in which they have a special interest, in an area for which they have demonstrated aptitude, through independent reading or research. Independent Study courses are listed by subject, in numerical order with other courses. Admission is at the discretion of the instructors, department chairpersons and Deans. The usual course registration form or Add/Drop form is used to register for independent study courses and must be submitted to the Records Office by the appropriate deadline dates.

Guidelines on Independent Study Courses

- 1 Independent Study courses may normally be taken only by majors and honours students in the area of their program. Minors students may be permitted to follow such a course only

if it is required to complete the minor program. Exceptions may be made with the permission of the Dean concerned.

2. Independent study implies adequate direct supervision by a faculty member during one of the regular sessions, i.e. fall, winter or summer session. The faculty member should not be on leave of any kind.
3. Independent Study courses will be under the general supervision of departments rather than individual professors, and the departments must agree to proposed programs of study, marking schemes and grades awarded.

ACADEMIC STANDING

B.A., B.Sc., B.B.A., B.C.S., B. Ed., Special students

Probation and Must Withdraw Status

For full-time students, registered at the University for a minimum of 2 consecutive semesters, a cumulative average of 55% calculated at the end of each regular academic year (September through April) will be required to remain in good academic standing. (See sections on School of Business and School of Education for particular requirements of these programs.)

For part-time students, registered at the University for a total of 18 credits or more, a cumulative average of 55% calculated at the end of each regular academic year (September through April) will be required to remain in good academic standing.

For General Interest Students (SPU) a cumulative average of 55% calculated at the end of each semester (Fall, Winter) will be required to remain in good academic standing.

Students who do not achieve this standard will be subject to the following regulations:

1. Full-time, part-time and SPU students failing to achieve a 50% average will be required to withdraw from the University for 12 months beginning with Bishop’s Summer School, after which they may apply to be considered for readmission. Please note: A student may be required to withdraw without first being placed on probation if their academic performance requires it.
2. Students with averages between 50% and 54% will be placed on academic probation. Full-time students will be required to raise their cumulative average to 55% by the end of the next regular academic year (September through April). Part-time students will be required to raise their cumulative average to 55% over the next 9 credits attempted.

Students on probation who fail to achieve the 55% in that period will be required to withdraw from the University for 12 months beginning with Bishop’s Summer School, after which they may apply to be considered for readmission.

3. Students completing courses in the Bishop’s Spring School, or supplemental or deferred examinations, will have their cumulative average recalculated on receipt of those final results. Their academic standing will be revised at that time should their new cumulative average require such a change.

Supplemental examinations must be written prior to the add/drop deadline to alter a student’s academic standing in that semester.

4. These regulations are implemented by the Divisional Deans and the Academic Standing Committee and administered by the Director of Admissions.
5. Decisions of the Divisional Deans on academic probation, withdrawal from the University, and subsequent readmission, are binding. A student may request the Academic Standing Committee to reconsider an unfavourable decision, but such a request does not necessarily constitute a basis for provisional readmission. Only one request for reconsideration of a Dean's decision will be heard by the Committee in each case.
Students wishing to request reconsideration should contact the Admissions Office for additional information on the process by July 15th. Decisions will normally be made by the Academic Standing Committee in mid-August.

General information

1. The specific regulations regarding maintenance of good standing in the programs of the Business Division and the School of Education are in effect in addition to the regulations above and following, where applicable (see Business or Education).
2. The cumulative average is calculated using all courses attempted at Bishop's including those in which a grade of "0" is received, with the exception of extra degree credit ESL courses, and courses from which students have withdrawn with permission. The courses are weighted according to their credit value.
3. Courses completed elsewhere are not included in the calculation of Bishop's University's cumulative average (see Credit for Studies Completed Elsewhere).
4. Should a student repeat a course at Bishop's in which a mark has already been received, the mark awarded in the second registration will be used in the calculation of the cumulative average and credits awarded, regardless of whether it is the higher or lower mark. Repeated courses will not affect academic standing, which is based on academic performance in a particular academic year.
5. Students with a failing cumulative average (i.e. below 50%) will not be eligible to graduate from the University (see Additional Graduation Requirement in Business Administration).
6. Students who have been asked to withdraw may not register for any course(s) at the University or complete courses elsewhere on a letter of permission.
7. Applications for readmission must be submitted in writing to the Admissions Office. Students who are readmitted will be admitted on probation.
8. A full-time student on academic probation may not be registered in more than 15 credits not including lab credits per semester. A part-time student on academic probation may not register in more than 9 credits not including lab credits until probation has been removed. Both ESL courses and EWP 099 are included in the credit count.
9. "Academic probation" and "must withdraw for academic reasons" will be recorded on the transcript of the students concerned.

10. Formal written notification from the Academic Standing Committee or the Director of Admissions is the only valid statement of a student's academic standing. Opinions expressed by or information provided by individuals are not binding unless confirmed in writing by the Committee or the Director of Admissions.
11. In cases of alleged procedural errors, incorrect information, or discrimination, an appeal may be made to the Student Appeals Committee.
12. Inquiries regarding any of the above should be addressed to the Admissions Office.

Regulations for Graduate Studies in Education

The Degree of M.Ed. or M.A.

To qualify for the degree of Master of Education or Master of Arts in Education, a candidate must be a graduate of this or another approved university, must be registered in the program for four semesters, or the equivalent, and must complete 45 credits of graduate level work in education, including a curriculum studies project, a monograph, a practicum, or a thesis.

Courses leading to these programs are offered during the summer and, in the evenings and on weekends during the Fall and Winter terms, both on the Bishop's campus and at off campus locations situated at selected school boards. The Master's programs are offered on a part-time basis.

General academic regulations

1. Applicants may be admitted to one of the following: the Master of Arts in Education or the Master of Education program.
2. M.Ed./M.A. students who receive a grade lower than 70% have failed the course, and are not permitted to continue in the program without formal permission of the School of Education's Admissions Committee.
3. Students enrolled in either the M.Ed. or the M.A. who have not registered for any course during a period of more than 24 months are deemed to have withdrawn. They may reapply for admission to the Program, subject to the same procedures and conditions as new applicants.

Transfer credit

A candidate for the Master of Arts in Education or the Master of Education degree may, with the permission of the Dean of the School of Education, complete up to three appropriate courses (9 graduate level credits) at another recognized institution. Candidates should obtain prior approval for such courses. Such courses may not be used to meet the requirements of core courses or projects, monographs, or theses.

Regulations for Graduate Studies in Science

The Division of Natural Sciences and Mathematics of Bishop's University offers a Master of Science degree (M.Sc.) program in the Departments of Chemistry, Computer Science, Mathematics and Physics. Potential students are referred to the appropriate departmental section of this calendar for specific program information.

Admission

1. Completed applications will be forwarded to the appropriate department for evaluation. Recommendations for admission to a degree program are made by the Department to the Dean. Final approval for admission is made by the Dean.
2. Advanced courses of instruction leading to the Master of Science degree are open to graduates of any university of recognized standing who have obtained at least a Bachelor's degree with honours with Class II standing, or its equivalent. An applicant who has followed a combined program, must have obtained at least a Class II standing in the subject of the Masters degree.
4. Applicants who do not satisfy these requirements may, with the permission of the department concerned and the Dean, be admitted to a qualifying semester(s) or year to bring their standing up to that of an honours B.Sc. degree.
5. Admission to graduate courses does not in itself imply candidacy for a graduate degree.
6. All information is processed through the Admissions Office.
7. These regulations for admission are minimum requirements. Additional requirements may be specified by departments, with the approval of the division.

General Regulations

1. Apart from any qualifying semesters, the minimum period of registration for the M.Sc. shall be one academic year of full-time study including research, or its equivalent in part-time study. This requirement must be met regardless of the amount of graduate work previously completed in any other program or at any other university.
2. The maximum time allowed for the fulfillment of the requirements for graduation shall be four consecutive years, excluding any qualifying semesters, in the case of full-time students. Part-time students must also comply with a time restriction: the course-work required for qualifying semesters (if any), and the regular credit requirements of the program must be completed at the rate of not less than six credits per year in consecutive years.
3. Students must obtain a minimum of 65 percent in each required course. Courses may not be repeated more than once.
4. Each degree candidate will be assigned, by the department in which the thesis is to be submitted, to a supervisor who shall be a faculty member of the department, and who will be responsible for advising the candidate and directing his/her research. Co-supervisors may also be assigned with the Department's approval.

5. The course of study will be arranged by the supervisor. The subject of the thesis also requires approval by supervisor.
6. The responsibilities of the students include: informing themselves of program requirements and deadlines, working within these deadlines, communicating regularly with their supervisors; and submitting annual progress reports to their supervisors and the division.
7. Students may receive (limited) financial support from the University in the form of research assistantships, undergraduate marking, tutoring and/or laboratory demonstrating duties. Such support requires approval in writing from both the department and the Dean. Duties and remuneration will be clearly stated, and in no case shall duties exceed 10 hours per week on average.
8. All students in graduate courses or degree programs enjoy the protection of the University's policy and procedures on academic review and appeal (see p. 21–25 of the University Calendar), and on research ethics (see the Vice-Principal for documentation).
9. A passing grade is 65% or better or "P" for pass. A grade less than 65% or "F" is a failure.

Supervision

1. It is the responsibility of the supervisor to monitor the progress of students throughout the graduate program, to ensure that all conditions of admission and requirements are fulfilled, to provide students with information on their program, their progress through it, and to advise them how to resolve problems which may arise during their program.
2. Thesis supervisors must be tenured or tenure-stream faculty or adjunct faculty. Sessional and contract faculty may co-supervise students with the department's approval. Emeritus Professors may co-supervise. In all cases, the department must ensure continuity of appropriate supervision of their graduate students.
3. Problems that cannot be resolved by discussion between the student and the supervisor shall be referred to the Dean.
4. Information concerning sources of financial support and policies on obtaining same should be sought from the Dean.
5. Students must receive guidance and constructive criticism concerning their progress on a regular basis through the program including regular meetings and/or e-mail communication with supervisors, attendance at research seminars, and appropriate responses to the student's annual progress report.
6. By April 15th of each year, M.Sc. candidates must submit to their supervisors a progress report covering both courses and research programs. This report must include the candidate's name, program and semester, a list of courses completed and their marks, a list of courses in which candidate is registered, and a list of courses yet to be taken. A statement concerning the research work must include the title of the thesis (or if this has not yet been decided, a general title of the project), a short outline of the work to its present state, including the amount of work done and the significant findings of the research, plus a statement of the work proposed for the future and a realistic estimate of the time required for its completion.

7. The supervisor will evaluate the annual progress report and grant a grade of "satisfactory" or "unsatisfactory". Copies of this graded report will go to the department concerned and one to the division. The department may compel a student to withdraw from the M.Sc. degree program in the event of an "unsatisfactory" grade on an annual progress report. Students have the right to have this decision reviewed, first by the Dean and then by the Academic Review Committee.
4. After the thesis has been defended and accepted, at least three copies shall be properly bound by the University at the candidate's expense, one for deposit in the Library, one for the retention of the department concerned, and one for the supervisor. At the request of the candidate, a fourth copy may be bound for his/her personal use.
5. Advice concerning the preparation and presentation of theses is to be provided by the supervisor and department concerned.
6. It is the responsibility of a supervisor to uphold and to transmit to students the highest professional standards of research and scholarship in the preparation of theses; to provide guidance in all phases of the student's research; to meet with their students regularly; to provide prompt feedback on submitted work including drafts of the thesis; and to clarify expectations regarding collaborative work, authorship, publication and conference presentations which may result from the student's research.

Thesis Regulations

1. All M.Sc. students must make a satisfactory oral presentation and defense of their thesis before graduating. Three copies of the thesis of a degree candidate must be submitted, with the approval of the supervisor, to the division at least two months in advance of the marks deadline of the semester in which it is to be defended.
 2. The three copies of the thesis delivered to the division must be accompanied by a letter from the supervisor informing the division of the names of the two persons who have consented to act as examiners of the thesis (see Regulation 3). The secretary of the division shall forward one copy of the candidate's thesis to each examiner with an appropriate covering letter.
 3. The thesis shall be orally presented and defended before two examiners other than the supervisor, one of whom shall be an external examiner who is a specialist in the candidate's field of interest. The examiners shall be selected by the supervisor and department concerned, subject to the approval of the Dean. A thesis will be accepted only following approval of its defence by both examiners. A thesis may be returned to the candidate for revision on the advice of one or both examiners, and subsequently re-defended (once only).
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Programs and Courses

Scheduling of Courses

The regular hours of the University are Monday to Friday, with classes commencing between 8:30 a.m. and 4:30 p.m. inclusive. Evening courses may begin after 4:30 p.m. A 3-credit course will have a minimum of 36 contact hours.

Before any course in the Calendar may be scheduled outside these hours, approval must be obtained from the appropriate Dean.

Course Numbering System

1. A fall semester course bears the letter “a”. A winter course bears the letter “b”. A one-semester course that may be given in any semester bears the letters “ab”. A two-semester course bears no letter, and is expected to be completed during the fall and winter semesters.
2. Undergraduate courses:
 - (a) Course numbers starting with “0” are usually those taken in the first year of a four year program, though they may be taken as additional credits in a three year program.
 - (b) Courses numbered from 100 to 199 are normally 1st year courses.
 - (c) Courses numbered from 200 to 299 are normally 2nd year courses.
 - (d) Courses numbered from 300 to 399 are normally 3rd year courses.
 - (e) Courses numbered from 400 to 499 are Honours courses or courses in the Bachelor of Education.
3. Graduate Courses: Courses numbered from 500 to 799.
4. All the courses listed in this Calendar are not necessarily offered every year. Please consult the Timetable for a list of offerings each semester.

Credits and Hours Code

With reference to the credit requirements, it may be noted that (normally) 1 credit is awarded for a one semester lab course, 2 credits for a two semester lab or music ensemble course, 3 credits for a one semester lecture course, 4 credits for a two semester practical music course, 6 credits for a two semester lecture course, and 6 or more for a thesis.

Information as to the credit value and hours of scheduled class activities for each course is contained in a three number code which follows the title. The first number in the code is the credit value of the course; the second number is the hours per week of lectures, tutorials and seminars; and the third number is the hours per week of laboratory work and other scheduled class activities. For example, the code 3-2-3 indicates three credits; two hours per week of lectures, tutorials or seminars; and three hours per week of laboratory work or other scheduled class activities. Additional information on the format of presentation of a course may be contained in the description of the course.

Please note that the credit requirement given for a program is the minimum and does not include lab credits. Students are advised to consult their letter of admission for the credit requirements specific to their program.

Definitions

Audit: With the permission of the instructor, a student may participate in class discussions and activities, but may not write the examinations or receive credit for a course. Audit courses must be part of the student’s formal registration, and are subject to the normal fee structure of the University (ie. are charged in the same manner as credit courses).

Cognate: A course offered by a department other than that in which a major has been declared, but which is accepted by the major department as part of the degree requirements.

Corequisite: A course in which a student must be registered concurrently (at the same time), in order to receive credit in the desired course.

Cumulative average: Average calculated on all courses attempted at Bishop’s in which a numerical grade has been received (including “0”s) with the exception of extra degree credit ESL courses. However, should a student repeat a course in which a mark has already been received, the mark awarded in the second registration will be used in the calculation of the cumulative average regardless or whether it is the higher or lower mark. [Repeated courses will not affect academic standing.]

Elective: A course taken in a degree program which is not applicable to the honours/major requirements, but which counts towards the total requirements for the degree; an optional course.

Exemption: A student may be exempted from an introductory course at the University when comparable nonuniversity course work has been completed elsewhere. No credit will be granted towards their Bishop’s degree for the exemption. The exempted course must be replaced by a Bishop’s course of equal credit.

Honours: An Honours program requires a high level of concentration in one area of study, normally about two thirds of the total courses taken for a degree. Students in Honours programs must demonstrate a high level of academic achievement and a thesis is often required.

Major: A Major in any subject consists of slightly less than half of the total courses taken for a degree (normally about 48 credits excluding labs).

Minor: A Minor in any subject consists of about one third of the total courses taken for a degree (normally 24 or 30 credits excluding labs).

Prerequisite:

- a. A course which must be successfully completed prior to registration for credit in the desired course (eg. MAT 210a is a prerequisite for MAT 211b).
- b. A course which is required by a particular department and which should be completed in the first 30 credits at Bishop’s (eg. PSY101 a required prerequisite for the Psychology major). These are listed in the program requirements prior to the course descriptions of each department.

Transfer Credit: A student transferring to Bishop's from another University may be eligible for advance credit to be granted on admission for their work completed on presentation of official transcripts and course descriptions for evaluation. Credits awarded are subject to further review should the student change programs.

Continuing Education

Bishop's University Continuing Education is dedicated to fulfilling the lifelong learning needs of the community by offering credit and non-credit courses and programs through its Lennoxville, Knowlton and St. Lambert campuses. Its mission is to ensure continued access to educational programs of the highest quality for adult learners within the Eastern Townships who wish to pursue their studies.

Whether you are trying to develop your career, enhance your skills through professional development, or engage in meaningful and enriching learning opportunities, our programs and courses are designed with you in mind.

For details on part-time studies, please refer to the Admissions section – Part-Time Studies.

Intensive day programs offered by Continuing Education include the following:

The English Language Summer School

Two sessions: (May–June) or (June–July)

1–4 Week English Immersion for Professionals during the month of July

For a list of current course offerings and all related information, please contact:

Office of Continuing Education

Bishop's University

2600 College Street

Sherbrooke, Quebec

J1M 1Z7

Telephone: 819-822-9670 or 1-877-822-8900

Email: kstandis@ubishops.ca

English Writing Proficiency (EWP) & The Writing Centre

English Writing Proficiency (EWP)

All students enrolled in B.A., B.Sc., B.B.A., B.C.S., or B.Ed. programs are required to satisfy the English Writing Proficiency (EWP) requirement by passing either the course EWP 099 or the EWP Examination before graduation. Please refer to the English Writing Proficiency section under “Programs and Courses” for details.

ALL STUDENTS ENTERING BACHELOR DEGREE PROGRAMS AT BISHOP'S UNIVERSITY MUST SATISFY THE ENGLISH WRITING PROFICIENCY REQUIREMENT (FOR EXEMPTIONS, SEE BELOW).

English Writing Proficiency (EWP) Requirement

The Requirement can be satisfied either by passing the EWP Exam or by passing the English Writing Proficiency course EWP 099, described below. Please note that EWP 099 does not count as an

elective toward a degree, and is to be completed in addition to the regular requirements for 90 credit or 120 credit programs.

1. Full-time students are required to take the EWP Exam at the beginning of their first semester.
2. Part-time students are required to take the EWP Exam in the semester immediately following their declaration of a degree program.
3. The EWP Requirement must be satisfied within the first 45 credits of a student's program. Students enrolled in ESL courses are given more time to meet the Requirement.
4. Students who do not pass the EWP Exam should review their exams at the Writing Centre (Divinity 10) before they rewrite.

Restrict Status will be placed on students who have not satisfied the EWP Requirement within their first 45 credits and who are not working on their writing through an approved course, as outlined below. **Restrict Status means that at registration, full-time students will be restricted to 4 courses + either ELA 116, an ESL course, or EWP 099.**

Students who do not pass the EWP Exam within their first 30 credits are advised to work on their writing skills:

1. Students who receive a 5 or over on their EWP Exam may take Effective Writing (ELA116), an ESL course, or EWP 099.
2. English first language students who receive less than 5 on the EWP Exam should enroll in EWP 099.
3. Second language students who receive less than 5 on the EWP Exam must enroll in an ESL course or EWP 099.

Students working on their writing skills in courses other than EWP 099 must still pass the EWP examination.

Exemptions from the EWP Requirement

The following students are exempt:

1. Students who have completed an undergraduate or graduate degree at an English institution.
2. Incoming international exchange students are not required to take the EWP exam. The EWP exam and the course EWP099 are optional for these students.
3. Students in Certificate programs.

EWP 099ab

English Writing Proficiency

3-3-0

A basic writing course of English for academic purposes, consisting of a lecture and tutorials designed to improve students' skills in written English. Emphasis is placed on the development and organization of ideas, text clarity, coherence, grammar and syntax.

This course is designed for students who do not pass the EWP Exam. Other students who wish to enroll in the course need permission from the Program Coordinator.

This course cannot be used as an elective.

Passing EWP 099 satisfies the EWP Requirement.

Consultation Service

Students who need help on their written assignments can sign up for free consultations at The Writing Centre. Assistance is given in planning, organization, development, grammar and syntax.

Workshops

The Writing Centre offers free Workshops to help students improve their written work.

Williams School of Business

The Williams School of Business at Bishop's University is dedicated to providing a high-quality undergraduate business education within the liberal arts tradition of the University. Students may work towards one of two degrees: A Bachelor of Business Administration (BBA) or a Bachelor of Arts (BA) with a major in business. The BA Major in business is ideal for those who wish to combine their business studies with a different subject. The BBA offers the most in-depth approach to business studies, with several concentrations for specialization.

BBA Concentration at Bishop's:

- Accounting
- Entrepreneurship
- Finance
- General Business Management
- Human Resources
- International Business
- Marketing

Minor programs are also available in both Business Administration and Entrepreneurship. Neither of these, however, is open to business students. Joint programs with other programs at Bishop's University include the BCS (Bachelor of Commerce and Science), Majors in Psychology/Human Resources, Arts Administration, as well as a Major and Minor in Sports Studies. Certificates in Business Administration and in Human Resources are also available.

We have an international focus within the Williams School of Business which is reflected in our international student exchange program, workshops, conferences, case competitions and faculty involvement in international research projects. The Williams School of Business also encourages students to develop an international awareness of different business practices and cultures. Students have the opportunity to participate in an **exchange program** that allows them to study abroad for up to one year at any partner university in over 20 countries worldwide.

The Williams School of Business offers a **Co-operative Education** Programme which combines a student's academic programme with integrated work experiences through full-time work terms and regular academic sessions. The work terms are designed to present the students with the opportunity to blend theory and practice and to gain relevant work experience.

The blend of courses and programs described in the following pages is designed to prepare our graduates for full and enriched participation in their chosen profession.

BUSINESS PROGRAMS

The Williams School of Business offers 2 programs leading to undergraduate degrees in business administration: A Bachelor of Business Administration (B.B.A.) and a B.A. Major Business. Students are admitted to either a 90-credit (3-year) or 120-credit (4-year) program depending on their educational backgrounds.

B.B.A. (BACHELOR OF BUSINESS ADMINISTRATION)

The B.B.A. prepares students for positions of responsibility in business. The program covers the fundamentals of accounting, finance, management, marketing, organizational behaviour and operations management. A course in business policy integrates the knowledge gained in these areas. In addition to the 45-credit Required Core, students select a concentration stream in which they will complete between 18 and 24 credits. Streams are available in the areas of Accounting, Finance, General Business Management, Human Resource Management, International Business, Entrepreneurship and Marketing.

I. 90-CREDIT B.B.A.

Required Business Core	45 credits
Concentration Stream (number of credits depends on the concentration stream selected)	18-24 credits
Free electives within or outside of Business (number depending on Concentration stream)	3-9 credits
Free electives outside of business	18 credits
Total	90 credits

Program prerequisites of MAT193, MAT195, if not previously satisfied, must be taken in addition to the 90-credit B.B.A.

Required Business Core Courses:

ECO102	Introduction to Microeconomics
ECO103	Introduction to Macroeconomics
BMA140	Statistical Analysis for Business Decisions I
BMA141	Statistical Analysis for Business Decisions II
BAC121	Purposes of Accounting
BAC221	Introduction to Managerial Accounting
BFN201	Finance I
BFN203	Finance II
BHR221	Organizational Behaviour
BMG112	Introduction to Management Theory and Practice
ILT100	Information Literacy and Critical Thinking Lab (1-credit lab)
BMG215*	Introduction to International Business
BMG311	Business Policy
BMK112	Consumer Behaviour and Introduction to Marketing
BMK211	Marketing Management
BMS231	Operations Management

Note: All required Business core courses are normally offered in each semester (Fall and Winter).

* 90-credit B.B.A. students who have declared Accounting as their concentration stream may take BAC241 instead of BMG215.

Any exemption a student receives to a course in the Required Business core will replace this exception.

Suggested Course Sequencing – 90-credit BBA**1st Year****1st Semester**

MAT193 (if required)*

BMA140 (if MAT193/195 completed)

ECO102 or ECO103

2 of 3 core courses:

BMK112

BMG112 + ILT100 (1-credit lab)

BAC121**

1 free elective (non-business course)

2nd Semester

MAT195 (if required)*

BMA141 (if MAT193/195 completed)

ECO102 or ECO103

3rd core course (see 1st semester)**1 of:** BMK211 or BHR221

1 free elective (non-business course) or

BAC122**

2nd Year**1 of** BMK211 or BHR221

BFN201

BAC221

BMG215

BFN203

BMS231

12 credits (4 courses) of free electives or concentration stream courses***

3rd Year

BMG311

27 credits (9 courses) of concentration stream courses or free electives

* If not required, replace with free electives

** ACCOUNTING STUDENTS ARE ADVISED TO TAKE BAC 121 IN THEIR FIRST SEMESTER, BAC 122 IN THEIR SECOND SEMESTER, AND BAC 211 COMMENCING THEIR 2nd YEAR.

*** Entrepreneurship concentration students should take BMG214 in the 1st Semester of their 2nd Year.

NOTE: Due to the flexibility of the program, students should consult with their Area Group Coordinator (e.g. Finance, Accounting, etc.) or Department Chair of Business, for assistance in course selection and sequencing.

II. 120 CREDIT B.B.A.

Required Business Core45 credits

Concentration Stream (number of credits depends on concentration stream chosen) ...18-24 credits

Free electives within or outside of Business (number depending on concentration stream chosen)3-9 credits

Free electives outside of Business (18 credits of which may be in Business)48 credits .

Program prerequisites of MAT193, MAT195, if not previously satisfied, must be taken within the 48 credits of free electives outside of Business.

Required Business Core Courses: See the 90-credit B.B.A. program requirements above.

Note: It is strongly recommended that 120-credit B.B.A. students pursue a second concentration, a Major or a Minor in another discipline. Students should consult the Department Chair of Business.

Suggested Course Sequencing – 120-credit BBA**1st Year****1st Semester**

MAT193

ECO102 or ECO103

2 of 3 core courses:

BAC121

BMG112 + ILT100 (1-credit lab)

BMK112

1 free elective (non-business course)

2nd Semester

MAT195

ECO103 or ECO102

3rd core course (see 1st semester)

2 free electives (non-business courses)

2nd Year**1st Semester**

BMA140

BAC221

BHR221

BMK211

1 free elective or Concentration Stream course

2nd Semester

BMA141

BFN201

BMG215

2 free electives or Concentration Stream courses

3rd Year

BFN203

BMS231

24 credits (8 courses) of Concentration Stream courses and free electives

4th Year

BMG311

27 credits (9 courses) of Concentration Stream courses and free electives

NOTE: Due to the flexibility of the program, students should consult with their Area Group Coordinator (e.g. Finance, Accounting, etc.) or Department Chair of Business, for assistance in course selection and sequencing.

III. HONOURS B.B.A.

To qualify for an **Honours B.B.A.** degree, a candidate must:

1. complete the regular B.B.A. Program (90- or 120-credit as applicable)
2. apply for entrance into the honours program in the term **prior to** their last 30 credits in the program, and have, at that time, an overall average of 75% in all courses taken in their program.
3. obtain an overall average of 75%
4. Register for BMG 352 (Honours Project)

90-Credit B.B.A. Honours Program:

Required Business Core	45 credits
Concentration stream (depending on concentration stream chosen)	18-24 credits
Free electives in or outside of Business (depending on concentration stream chosen)	0-6 credits
Free electives outside of Business	18 credits
BMG352 (Honours Project)	6 credits

Total	93 credits
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120-Credit B.B.A. Honours Program:

Required Business Core	45 credits
Concentration stream (depending on concentration stream chosen)	18-24 credits
Free electives in or outside of Business (depending on concentration stream chosen)	0-6 credits
Free electives (18 credits may be in Business)	48 credits
BMG352 (Honours Project)	6 credits

Total	123 credits
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CONCENTRATION STREAMS

Within the B.B.A. program, the Williams School offers concentration streams in Business disciplines. A concentration stream is comprised of 27 credits. In order to be credited with a concentration as part of the B.B.A., all of the stream requirements must be completed. Students should consult the Area Group Coordinator of each concentration stream for course selection advice. For students completing two concentration streams, one course maybe double counted across the two concentration streams.

ACCOUNTING CONCENTRATION STREAM

Knowledge of accounting is fundamental to all disciplines in business. The skills acquired in the program prepare students for positions of leadership in organizations spanning all sectors of the economy including, senior management, strategic government positions, consulting, teaching, auditing and finance.

At the Williams School, this stream is designed to meet the needs of business students in two ways:

- for students who want to have a good understanding of accounting but do not intend to become professional accountants or accounting specialists
- for students with clearly defined career objectives and interested in further education and professional training, such as a CA, CMA or CGA designation.

Professors Lessard and Gandey

Accounting Concentration Stream Courses

9 courses, 27 credits

90-credit B.B.A. students who have declared Accounting as their concentration stream may take BAC241 instead of BMG215. Any exemption a student receives to a course in the Required Business core will replace this exception.

Required:	4 courses, (12 credits)
BAC122	Financial Accounting
BAC211	Intermediate Financial Accounting I
BAC312	Intermediate Managerial Accounting
BAC331	Taxation I

Plus any 4 of:

BAC212	Intermediate Financial Accounting II
BAC241	Systems and Control
BAC311	Advanced Financial Accounting
BAC332	Taxation II
BAC341	Auditing
BAC322	Management Control

Plus: 1 course which may be in Accounting, Business or outside of Business

90-credit accounting students are advised to take BAC121 in their first semester, BAC122 in their second semester, and BAC211 commencing their 2nd year.

Accounting students contemplating an accounting designation are advised to consult with the accounting department and the respective provincial associations for the specific details of the requirements. Additional courses in a graduate program are required for the CA and the CGA designations. The CMA association may also require that additional courses/coaching be taken.

Accounting students contemplating an accounting designation are strongly recommended to include in their curriculum the course BMG221 (Business Law).

ENTREPRENEURSHIP CONCENTRATION STREAM

This concentration stream provides the opportunity for the student to obtain a complete understanding of the entrepreneurial process of starting a new venture, of growing the venture, and of harvesting the new venture. This is within the context of the current rapidly growing entrepreneurial movement worldwide. The student will learn how the entrepreneurial mind thinks, how marketing an opportunity is assessed, and how resources are harnessed to take advantage of that opportunity. The course will include experience working with actual entrepreneurs in conjunction with the Dobson-Lagassé Entrepreneurship Centre.

Entrepreneurship Concentration Stream Courses:

9 courses, 27 credits

Required:	5 courses, (15 credits)
BHR 224	Human Resource Management
BMG 230	Business Research Methods
BMG214	Introduction to Entrepreneurship: New Venture Creation
BMG 318	The Successful New Venture: Feasibility Analysis and the Management of Risk
BMG 328	Business Planning and Start-up Strategies

Plus any 3 courses (9 credits) of:

BMG 322	Change Management
BMG 323	Interpersonal Skills
BMG 324	Management of Innovation
BHR 316	Organizational Conflict and Negotiation
BMK 321	Marketing Research
BMK 323	Marketing Communications
BCS 212	E-Commerce

Plus: 1 course which may be in this stream, in business, or outside of business

FINANCE CONCENTRATION STREAM

The curriculum is designed to provide students with broad exposure to all dimensions of finance. Students will learn professional skills and acquire technical and analytical competence to pursue challenging careers in corporate finance, banking, portfolio management, securities research and financial planning.

In addition to a thorough understanding of the principles of financial management, students will be exposed to both theoretical and practical aspects of investment management, capital budgeting, capital formation, and risk hedging. Opportunities to explore current topics and apply practical solutions to current theory are also provided. When following a prescribed sequence of courses, students are qualified to write the first level C.F.A. (Chartered Financial Analyst) exam immediately upon graduation. Students can also compete in their final year of studies for managerial positions with the SEED Portfolio.

Professors Béquet, Leventhal, Valsan

Finance Concentration Stream Courses:

9 courses, 27 credits

Required Courses: 2 courses (6 credits)

BAC122	Financial Accounting
BFN210	Capital Markets

Plus any 5 courses (15 credits) of:

BFN301	Capital Budgeting
BFN315	Financial Derivatives
BFN340	Risk Management in Financial Institutions (new course)
BFN341	Corporate Governance (new course)
BFN342	Theories of Finance (new course)
BFN351	Financial Statement Analysis
BFN352	Investment Analysis and Portfolio Management
BFN354	Seminar in Finance
BFN356	SEED Portfolio (6 credits)
BFN360	International Finance

Plus any 2 elective courses (6 credits), in or outside of Business:

GENERAL MANAGEMENT CONCENTRATION STREAM

This concentration stream allows students to design their own concentration stream. Students may select courses from any other stream based upon their personal interest and objectives. Students are advised to consult with the Chair or the Dean for assistance in course selection.

All Williams School Faculty

General Management Concentration Stream Courses:

9 courses, 27 credits

Required: Any 6, 300-level Business courses (18 credits)

Plus: 3 courses which may be in Business or outside of Business

HUMAN RESOURCE MANAGEMENT CONCENTRATION STREAM

There is growing recognition that the quality of an organization's human resources plays a strategic role in an ever changing business environment. With organizations facing the need for continuous

change in a competitive environment they must, more than ever, begin to rely on the knowledge, skills and abilities of their workforce to confront such challenges. Through courses such as Compensation Management, Human Resource Management, Industrial Relations, Training and Development, Occupational Health and Safety and Organizational Behaviour, students will learn how to ensure that the Human Resource goals of attracting, developing and maintaining a competitive workforce are accomplished. Students completing this concentration stream may want to discuss with faculty the course options for certification as a Human Resource professional.

Professors McRae, Robson, Harvey, Gallina, Teed

Human Resource Management Concentration Stream Courses:

9 courses, 27 credits

Required: 1 course (3 credits)

BHR224	Human Resource Management
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Plus any 6 of:

BMG230	Business Research Methods
BHR312	Industrial Relations
BHR313	Compensation Management
BHR315	Training and Development
BHR316	Organizational Conflict and Negotiation
BHR321	Organizational Theory
BHR325	Topics in Human Resource Management
BHR326	Personnel Recruitment & Selection
BHR328	Occupational Health and Safety
BHR330	International Human Resources
BHR333	Employment Law
BHR334	Administering the Collective Agreement
BMG322	Change Management
ECO204	Labour Economics

Plus: 2 courses which may be in this stream in Business, or outside of Business

Note: HR students contemplating the Human Resources Professional designation should consult the area coordinator for appropriate courses.

INTERNATIONAL BUSINESS CONCENTRATION STREAM

This concentration stream provides tomorrow's managers (today's Bishop's students) with a broad vision of the world and its structures, as well as with global strategies and management practices. The International Business concentration stream builds on the existing strengths of the core curriculum and International Business concentration stream courses by offering cognate courses in disciplines such as Political Science and Economics to provide the worldwide perspective essential to transnational managers.

To be accepted, students must make a formal application to the Dean of Business for admittance to the International Business Concentration Stream. Normally, students should apply after the successful completion of 15 credits (90-credit program) or 30 credits (120-credit program) in their Business program. In order to be eligible to apply, a student must have a minimum of a 70% cumulative average. A student is then required to maintain a minimum cumulative average of 70% to remain in the concentration and to be eligible to go on an exchange. The number of spaces in the concentration stream is

limited. Simply having an average of at least 70% does not guarantee admission to the concentration stream. Students must select their courses in consultation with the Dean of the Williams School of Business. A requirement of students accepted into the International Business concentration stream is to study abroad as an exchange student for a minimum of one semester, and a maximum of two semesters. Students will receive a Williams Travel Bursary. It is recommended that International Business concentration stream students include language courses in their free electives. The exchange component combined with the emphasis on managing across cultures, economies, currencies and various governments' policies will introduce the student to the current issues, problems and solutions that contemporary managers face in a global economy.

Professors Monk, Harvey, Robson, Rutihinda, Valsan, Fortier

International Business Concentration Stream Courses:

9 courses, 27 credits

Required: None

Any 6 of (but no more than 2 cognates) from:

BFN360	International Finance I
BHR316	Organizational Conflict and Negotiation
BMG222	International Law
BMG312	Competitiveness
BMG315	International Management
BMG322	Change Management
BMK372	International Marketing

Cognates:

POL140	International Relations
POL231	European Union: History, Institutions and Policies
POL241	International Affairs: Conflict, Ethics and the Prospects for Global Governance
POL333	Internationalization of European Public Policies
POL346	Politics of Global Finance
ECO217	International Economics

Plus: 3 additional courses which may be in this stream in Business, or outside of Business

MARKETING CONCENTRATION STREAM

The marketing function and the role of the marketing manager, are important and demanding. Analytical tools from economics, mathematics, statistics, management science, and from the social and behavioural sciences are applied in marketing.

The marketing curriculum is designed to provide the student with a comprehensive analysis of contemporary marketing techniques and with an analysis of the environmental forces affecting the marketing activities of the firm.

Professors Palmer and Reid, Wang

Marketing Concentration Stream Courses:

9 courses, 27 credits

Required: 3 courses, (9 credits)

BMG230	Business Research Methods
BMK321	Marketing Research
BMK332	Marketing Channels

Plus any 4 of:

BMK312	Consumer Behaviour II
BMK323	Marketing Communication

BMK340	Product Strategy and Innovation
BMK350	Marketing Strategies for Environmental Sustainability
BMK354	Topics in Marketing
BMK362	Sport Marketing
BMK371	Industrial Marketing Strategy
BMK372	International Marketing Strategy
BMK381	Marketing Policies

Plus: 2 courses which may be in this stream, in Business or outside of Business

IV. 90 CREDIT B.A. MAJOR BUSINESS

This program is designed for students who desire less concentration in Business Administration and greater opportunity to develop skills in another area of study. The program requires the same Business core courses as that of the B.B.A. Program. Students have the opportunity to pursue a major or a minor in a discipline outside of Business which should be made in consultation with the chair of the appropriate department.

This program consists of:

Required Business Core (see 90-credit B.B.A. program above)	45 credits
Business Free electives	15 credits
Non-Business free electives	30 credits

Total	90 credits
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Program prerequisites of MAT193 and MAT195 must be taken in addition to the 90-credit B.B.A. requirements.

Students must select 15 credits of business electives. All course prerequisites must be respected. Students are advised to discuss their proposed course selections with the Department Chair or Dean.

Students must take 30 credits outside the Business Department. Completion of a minor is strongly suggested.

Suggested Course Sequencing – 90-credit BA Major Business

1st Year

1st Semester

MAT193 (if required)*
BMA140 (if MAT193/195 completed)
ECO102 or ECO103

2 of 3 core courses:

BMK112
BMG112 + ILT100 (1-credit lab)
BAC121
1 free elective (non-business course)

2nd Semester

MAT195 (if required)*
BMA141 (if MAT193/195 completed)
ECO103 or ECO102

3rd core course (see 1st semester)

1 of: BMK211 or BHR221
1 free elective (non-business course)

2nd Year

1 of BMK211 or BHR221
BFN201
BAC221

BMG215
BFN203
BMS231
12 credits (4 courses) of free electives or business electives

3rd Year

BMG311
27 credits (9 courses) of free electives or business electives

* *If not required replace with free electives.*

V. 120 CREDIT B.A. MAJOR BUSINESS

Requirements for the 120-credit B.A. Major Business are given below. Students in this program are strongly encouraged to pursue either a major or minor in another discipline.

Required Business Core
(see 120 B.B.A. program above).....45 credits
Free Business electives15 credits
Free electives (may include up to 18 credits of
Business electives)60 credits

Total **120 credits**

Program prerequisites of MAT193 and MAT195 would be taken within the 60-credits of free electives.

Students must select a minimum of 15 credits of business electives. All course prerequisites must be respected. Students are advised to discuss their proposed course selections with the Department Chair or Dean.

Students must take 60 credits of free electives. A maximum of 18 credits of business electives may be included in this total. Pursuit of a major or a minor is strongly suggested.

Suggested Course Sequencing – 120-credit BA Major Business**1st Year****1st Semester**

MAT193
ECO102 or ECO103

2 of 3 core courses:

BAC121
BMG112 + ILT100 (1-credit lab)
BMK112
1 free elective (non-business course)

2nd Semester

MAT195
ECO103 or ECO102

3rd core course (see 1st semester)

2 free electives (non-business courses)

2nd Year**1st Semester**

BMA140
BAC221
BHR221
BMK211
1 free elective or business elective

2nd Semester

BMA141
BFN201
BMG215

2 free electives or business electives

3rd Year

BFN203
BMS231
24 credits (8 courses) free electives or business electives

4th Year

BMG311
27 credits (9 courses) free electives or business electives

Minor: 24 credits in a discipline outside the Business Department. (Consult the appropriate Department Chair).

Electives: Of the 60 credits of free electives indicated above, students may include in this total up to 18 credits of free business electives.

VI. CO-OPERATIVE EDUCATION PROGRAM

The Co-operative Education Program combines a student's academic program with integrated work experiences through full-time work terms and regular academic sessions. The work terms are designed to present the students with the opportunity to blend theory and practice and to gain relevant work experience.

Each co-operative work term is four months in length and the student will be registered in a 3-credit Co-operative Placement course. These course credits are in addition to their regular degree program requirements. Each is graded on a pass/fail basis and this grade is not included in the student's cumulative average. The evaluation is the responsibility of a faculty member and will be based upon the submission of a work term report by the student and a satisfactory job performance report submitted by the employer. Normal academic regulations apply to the conduct and evaluation of the courses.

Students in a 90-credit program will be required to complete 2 work terms (6 credits). Students in a 120-credit program will be required to complete 3 work terms (9 credits). All work terms must be completed before the student's final academic semester. While every effort will be made to find a suitable placement for all students in the program, no guarantee of placement can be made since the employment process is competitive and subject to market conditions.

Admission to the Co-operative Education Program

Since the number of co-operative placements is limited, admission will be competitive and selective with academic performance being the primary criterion. Admission is limited to full-time students in any Honors or Major program offered in the Williams School of Business.

Students in a 90-credit program may apply after completing 15 credits. Students in a 120-credit program may apply after completing 30 credits. Please consult the Co-operative Education section on the Bishop's University website for important dates, deadlines and updates.

Tuition and Fees

Each work term placement is a 3-credit course and students will pay tuition based upon their fee paying status (Quebec resident, Canadian out-of-province, International).

In addition, an administrative fee of \$200 per placement will be charged to help cover the cost of monitoring and evaluating work placement. Payment is to be made through the Business Office.

Work Term Evaluation

Successful completion of the work term is based upon the receipt of a satisfactory job performance report from the employer and a satisfactory work term report submitted by the student.

The work term report will analyze and make recommendations concerning an issue, opportunity or problem related to or evoked by the student's work placement environment. The topic of the report will be selected in consultation with the faculty and the employer and must be approved by both.

The job performance report will be completed by the employer, using guidelines supplied by the Williams School of Business. It is the student's responsibility to ensure that the employer sends the completed evaluation to the faculty member supervising the placement. Employer evaluations are confidential and are not reported on the student's transcript.

VII. INTERDISCIPLINARY PROGRAMS

1. Arts Administration Option – Please see the Division of Humanities section of the calendar for program requirements.

The 72-credit interdisciplinary program combines the study of business, the creative arts and arts administration to provide students with the skills and knowledge needed to be active participants in the cultural sector. In addition to the core courses in business and in the core courses in one of the creative arts (Drama, Fine Arts or Music), students also take 12 required credits in Arts Administration. At the end of their program, students will be provided with co-op opportunities when they enrol in the program's Practicum, AAD353, and will be placed in a variety of cultural venues consistent with their disciplinary focus. In addition to the Practicum course, there are several opportunities for internship employment on campus through internships in Centennial Theatre, The University Gallery, the Music Chez Nous Concert Series, the Eastern Townships Research Centre and other campus-based professional organizations.

2. Psychology and Human Resource Management - Please see the Psychology section of the calendar for program requirements.

This interdisciplinary program allows students to complete a Major in Psychology with a concentration in Human Resource Management.

VIII. MULTIDISCIPLINARY PROGRAMS

1. B.A. Major in Information Technology – please see the Multidisciplinary Program section of the calendar for program requirements

This program provides the necessary skills and knowledge to work/design/participate within organizations that manage large amounts of data and provide services to a large number of users.

2. Bachelor of Commerce and Science Program – B.C.S. – please see the Multidisciplinary Program section of the calendar for program requirements

This program allows students to simultaneously pursue studies toward two concentrations of their choosing: one in a field of business or economics, and one in a scientific discipline.

IX. MINOR IN BUSINESS ADMINISTRATION

The Minor in Business Administration requires the completion of the following courses:

BAC121
BMG112
BMA140 (requires both MAT193 and MAT195)
BFN201 (requires ECO103 and BMA140)
BMK112

Plus 9 credits of Free Business electives

It is important to note the following:

1. While the Business Minor appears to require the completion of 24 credits, in fact a minimum of 33 credits is generally necessary as a result of required course prerequisites for BMA140 and BFN201 (see above).
2. Students who have been granted course equivalence for BMA140 must replace BMA140 with a free Business elective course.
3. Students pursuing the Minor must respect all prerequisite requirements for senior Business courses they take as free Business electives. For example, a student wishing to take Human Resource Management (BHR224) must first take Organizational Behaviour (BHR221).

X. MINOR IN ENTREPRENEURSHIP

(For non-business students)

The Williams School of Business offers an Entrepreneurship Minor requiring the following courses:

BMG214
BMG318
BMG328
Plus 15 credits of Business electives

Total:

24 credits

Note: Students pursuing the Entrepreneurship Minor must respect all prerequisite requirements for senior Business courses they take as free Business electives. For example, a student wishing to take Human Resource Management (BHR224) must first take Organizational Behaviour (BHR221). In some cases, required prerequisites may include MAT193 and MAT195. It is strongly suggested that students consult the Williams School Chair or Dean prior to embarking on this Minor.

XI. CERTIFICATE PROGRAMS IN BUSINESS

Certificates may be completed on a full-time or a part-time basis.

Regulations governing Certificate Programs

Admission requirements

Students must make a formal application for admission to Certificate programs on the special form for this purpose available at the Admission's Office.

Applicants for admission to Certificate programs must fulfill the same admission requirements as applicants to a Bachelor's degree in the same discipline. (see Admission requirements — Degree Studies).

Academic standing — probation and must withdraw

Students in the Certificate programs must meet the Academic Standing criteria for part-time students as outlined in the Academic Calendar. Students in the Certificate in Business Administration must also fulfill the requirements for maintaining good standing in Business.

Transfer between Certificate and Degree programs

Students may make application for transfer from a Certificate to a Degree OR from a Degree to a Certificate program in the same or another discipline. The regulations governing Academic Program Changes will apply.

A maximum of 21 credits may normally be transferred from a Degree to a Certificate program.

A maximum of 30 credits may normally be transferred from a Certificate to a Degree program. If a student has graduated from a Certificate program, the credits earned in the Certificate may not be used to satisfy the requirements of a minor in the same discipline.

Transfer of credit to Certificate programs

A maximum of 9 credits which have not been counted towards any other degree or certificate program, at any other university, may be transferred to a Certificate program at Bishop's, subject to the regulations governing transfer of credit from other institutions (see Credit for Studies Completed Elsewhere).

Completion of a Certificate program following completion of a Bachelor's degree

Students who have completed a Bachelor's degree at Bishop's University may be admitted to a Bishop's Certificate program in a different area of study. All 30 credits required for the Certificate must be completed at Bishop's.

Certificate in Business Administration**30 credits****Description and objectives:**

The Certificate in Business Administration provides an academic background in Business Administration to students who are pursuing or wishing to pursue a career in management in the private or public sectors. The Certificate program presents a broad survey of underlying disciplines and an introduction to the functional areas in Business Administration, both theoretical and practical.

Admission requirements: *(See Regulations governing Certificate programs).*

Prerequisites to programs:

The Certificate in Business Administration requires that an applicant complete Calculus I and II (or equivalent).

I. Required courses: 5 courses — (15 credits) in Business Administration

BAC 121ab	Purposes of Accounting	3-3-0
BMG 112ab	Management Theory and Practice	3-3-0
BMA 140ab	Statistical Analysis for Business Decisions I	3-3-0
BFN 201ab	Finance I	3-3-0
BMK 112ab	Consumer Behaviour and Introduction to Marketing	3-3-0

II. Optional courses: 5 courses — (15 credits) in Business Administration:

Any other 5 courses in Business Administration leading to the B.B.A. degree. (Note: Cognate courses may not be used towards this Certificate.)

Certificate in Human Resources**30 credits****Description and objectives:**

There is a growing recognition that the quality of an organization's human resources plays a central role in an ever changing business environment. With organizations facing the need for continuous change in a competitive environment, they must more than ever begin to rely on the knowledge, skills and abilities of their workforce to confront such challenges. Human resources is a field of business administration that works towards ensuring this for the organization. Through courses such as compensation management, human resource management, industrial relations, training and development, and organizational behaviour, students in the Certificate in Human Resources program will learn how to ensure that the human resource goal of attracting, developing and maintaining a competitive workforce is accomplished. Students completing this certificate for provincial certification as a human resource professional should discuss the program with the Human Resource Area Coordinator as additional course requirements may be necessary.

Admission requirements: *(See Regulations governing Certificate Programs).*

Tier I courses required:

BMG112ab	Management Theory and Practice	3-3-0
BHR221ab	Organizational Behaviour	3-3-0
BHR224ab	Human Resource Management	3-3-0

Tier II courses 5 out of 10 required:

BHR312ab	Industrial Relations	3-3-0
BHR313ab	Compensation Management	3-3-0
BHR315ab	Training and Development	3-3-0
BHR321ab	Organizational Theory	3-3-0
BHR326	Personnel Recruitment and Selection	3-3-0
BHR328	Occupational Health and Safety	3-3-0
BHR333	Employment Law	3-3-0
BHR334	Administering the Collective Agreement	3-3-0
ECO204ab	Canadian Labour Economics	3-3-0

Tier III courses 2 out of 4 required:

BHR316ab	Organizational Conflict and Negotiation	3-3-0
BMG322ab	Change Management	3-3-0
BMG323ab	Interpersonal Skills	3-3-0
BMG324ab	Management of Innovation	3-3-0

REGULATIONS APPLYING TO ALL BUSINESS PROGRAMS

Enrollment in the Williams School of Business is limited. Students must normally have a minimum average of 70% from CEGEP and 75% from high school to be considered for admission to these programs.

1. PREREQUISITES

a. Mathematics:

To enter a 3-year Business program (90 credits), a student must normally have a Quebec collegial diploma (D.E.C.), or the equivalent, including Mathematics 201-NYA (201-103) and 201-NYB (201-203). Students having the required prerequisites can normally complete their undergraduate programs in three years.

Students lacking these prerequisites will have their programs adjusted, i.e. increased by the number of mathematics credits required.

Students entering four-year degree programs must register in the required equivalent calculus — MAT 195, or both MAT 193 and 195. The requirement can also be fulfilled by completing MAT 191 and 192. Students lacking the appropriate preparation for MAT 193 will be required to take an additional course MAT 190. Students in a 120-credit program who must take the required mathematics courses will use these courses as free non-business electives.

b. Students are normally required to complete MAT193 and MAT195 within the first 30 credits of their program for 90-credit students and within 45 credits for 120-credit students.

c. Computer Literacy

Students are expected to have basic computer literacy in the following areas — word processing, spreadsheets and data bases.

2. EXEMPTIONS

Students who have been granted exemptions from Required Business core courses must replace them with Business courses. Students are advised to consult with the Department Chairperson prior to course selection.

3. DOUBLE FAILURE RULE

Any student who twice receives a failing grade in a course offered by the Business Department will not be permitted to repeat the course again. If this is a business course that is required in order to graduate with a B.B.A., B.A. Major Business, the student will not be eligible to graduate with that degree. This implies that having twice received a failing grade in the same business course at Bishop's precludes a student from receiving transfer credits for the same course.

4. TRANSFERS FROM OTHER BISHOP'S PROGRAMS

To be eligible to transfer into either the B.B.A. or B.A. Major Business from a non-business program, a student must have successfully completed at least 30 credits at Bishop's and have achieved a minimum overall average of 65% based on all courses attempted. The number of student transfers is determined based on final enrollment figures and the quota for the School's maximum enrollment.

5. MAINTENANCE OF GOOD STANDING

Notwithstanding the University regulations on Academic Standing, the Williams School has its own regulations on Maintenance of Good Standing. Students with cumulative averages of 60% or more remain in good standing in the B.B.A. and B.A. Major Business programs. Once students have completed two academic semesters, their averages will be calculated on all courses attempted. In the calculation of a student's average, failures will be included. If the failed course is repeated, or if a passed course is repeated to achieve a higher mark, the second attempt in either case will be used in the cumulative average.

All students, after completing their first two semesters, must maintain a cumulative average of over 60% to remain in good standing. After two semesters, students with cumulative averages less than 50% must withdraw from the program. Those with cumulative averages between 50% and 59% will be permitted to remain in the Williams School for one semester in which they must improve their cumulative average to 60%. Students who do not achieve good standing will not be eligible to continue in the BBA or BA Major Business programs at Bishop's University, nor will they be eligible to transfer back into these programs.

Students who fail to maintain good standing in Business will be required to make a choice of an alternate degree program by the end of two consecutive semesters following their dismissal from the Business program. Should they fail to do so, or fail to be accepted into an alternate program, they will not be permitted to register as a full-time student in the next semester.

6. GRADUATION "WITH DISTINCTION"

The notation "with Distinction" will appear on the transcript of students who graduate with a cumulative average of 80% or more.

7. ADDITIONAL GRADUATION REQUIREMENT

(B.B.A. and B.A. Major Business)

A student must have a minimum cumulative average of 60% in all courses taken in order to graduate with a B.B.A. or B.A. Major Business degree. Calculation of this average will employ the same methodology as in the "Maintenance of Good Standing"

8. BUCS

All B.B.A. and B.A. Major Business students are assessed a \$10.00 per semester fee to cover the activities and events of the Bishop's University Commerce Society (BUCS).

9. CREPUQ Exchanges

See International Business Concentration Stream for International Exchanges

Students wishing to explore the opportunity to study abroad as an exchange student should consult with the International student office. Students need a minimum cumulative average of 70% to qualify to go on exchange. Students should also consult with the Chair or Dean of the Williams School for important academic information concerning exchanges.

BUSINESS COURSES

ACCOUNTING COURSES

- BAC 121ab Purposes of Accounting 3-3-0**
The study of accounting and its role in the analysis and communication of financial events. The information provided by accounting, particularly through the financial statements, and issues associated with existing accounting processes will be explored.
- BAC 122ab Financial Accounting 3-3-0**
An examination of the measuring, recording and reporting of financial information with reference to specific items in the financial statements.
Prerequisite: BAC 121. (This course is required for students in Accounting and Finance streams).
- BAC 211a Intermediate Financial Accounting I 3-3-0**
Further development of accounting principles. Particular emphasis is placed on an in-depth evaluation of financial statement presentations in Canada.
Prerequisite: BAC 122. (This course is required for students in an Accounting stream).
- BAC 212b Intermediate Financial Accounting II 3-3-0**
An in-depth consideration of specific accounting topics (e.g. accounting for income taxes, partnership accounting, current value accounting). Current practices and the relevant CICA recommendations will be reviewed in terms of theoretical concepts and principles.
Prerequisite: BAC 211
- BAC 221ab Introductory Managerial Accounting 3-3-0**
This course is an introduction to the tools of accounting information for management decision making. Topics include comparison of financial and managerial accountants, job order costing, process costing, cost behaviour, cost-volume relationships, activity based costing, budgeting, standard costs and reporting for control.
Prerequisite: BAC 121
- BAC 241a Systems and Control 3-3-0**
All organizations require reliable and secure information systems in order to successfully conduct their day-to-day operations. For many businesses, sophisticated accounting information systems are in place and internal control is crucial in the process of producing reliable financial information. In the context of the information age, this course examines corporate responsibility as well as the function of computerized systems. Topics such as accounting systems development, implementation of controls, fraud detection and E-commerce security will be explored.
Prerequisite: BAC 122
- BAC 311b Advanced Financial Accounting 3-3-0**
A study of accounting theory and application related to the following topics — business combinations, long-term intercorporate investments, branch accounting, non-profit accounting, and foreign exchange. Emphasis is on accounting principles currently accepted in Canada.
Prerequisite: BAC 212 or permission of instructor
- BAC 312a Intermediate Managerial Accounting 3-3-0**
This is the second course in managerial accounting which covers new topics such as balanced scorecards, limitations of reporting for control, non-financial measurements and outsourcing. Furthermore, application of the various techniques learned in BAC221 will be applied.
Prerequisites: BAC221, BMA141 and BAC211
BAC211 may be taken concurrently with BAC312
- BAC 322b Management Control 3-3-0**
Written and oral analysis of management control problems. Topics include decision models, performance evaluation and decentralization. This course also applies theories from other accounting courses into practice via case analysis.
Prerequisites: BAC212 and BAC312
BAC212 may be taken concurrently with BAC322
- BAC 331a Taxation I 3-3-0**
Introduction to income tax law in Canada with primary emphasis on the determination of the tax liability of individuals in receipt of various sources of income. Topics include Residence, Tax Status, Capital Cost Allowances, Capital Gains, Property Income and Tax Credits. Issues such as the equity fairness and complexity of the tax system, tax evasion and tax planning are considered.
Prerequisite: BAC 122

- BAC 332b Taxation II 3-3-0**
This course builds upon the principles and concepts of Canadian Income Tax introduced in BAC 331. In particular, it examines the application of income tax law as it applies to Corporations. Attention is given to effective income tax planning for shareholder — manager remuneration, estates and for capital gains deferrals.
Prerequisite: BAC 331

- BAC 341b Auditing 3-3-0**
The concept of internal control and fundamentals of auditing. Topics include: legal and moral responsibilities of the auditor; controls required in principal accounting systems; selection of appropriate audit techniques; and preparation of audit reports.
Prerequisite: BAC 212, BAC241

BUSINESS COMPUTER SCIENCE

- BCS 212ab Electronic Commerce 3-3-0**
Internet technology has dramatically changed the way people communicate, collaborate, coordinate and conduct business. This course is about Electronic Commerce and Electronic Business; a different way of doing business. The course deals with EC technological infrastructure including the World Wide Web networks, hardware and software. It also deals with EC implementation strategies and the impact of EC on traditional businesses and organizational structures, strategies and management.
Prerequisite: BAC121 and BMK112

- BCS 215a Programming with Visual Basic 3-3-0**
This course introduces visual basic concepts and programming to exploit windows-based applications and, as a result enhance personal productivity. Students with no previous programming experience learn how to plan and create their own interactive windows applications, and would also learn how to use Visual Basic in situations they are likely to encounter in the workplace. The course takes a task-driven approach using practical examples. The course capitalizes on Visual Basic's power to perform complex decision and information management tasks.

- BCS 216 Managing Information Technology 3-3-0**
The objective of this course is to provide students with a better understanding of modern techniques to manage information Technology. This includes a basic knowledge of main ideas and key theories relating to IT management; management of hardware, software and network of large scale information systems; management and control of information systems security; and understanding complex concepts of data management.
Prerequisite: BCS 220

- BCS 220a Management of Information Systems 3-3-0**
This course covers the management perspective of Information Systems. An IS Department or IS unit manages data and information which are among the most valuable organizational resources in today's modern businesses. The MIS includes the setting of a direction for information resources, the management of technology resources and the management of the information systems function. A variety of different types of IS will be covered. The list includes Enterprise Resource Planning Systems, Knowledge Management Systems, and Electronic Systems.
Prerequisite: BMG112

- BCS 311b Knowledge Management 3-3-0**
Information is already a major commodity to be produced, distributed and exploited in a business context. Apart from traditional services (libraries, information brokers, ... etc), the rise of new electronic means of communication and storage are beginning to make important sources of specialized information directly available to end users. This course will focus on new ways of exploiting this information to adapt it to the specific needs of individual managers and administrators. The main concepts to be considered will be Information Retrieval, Data Mining and Automated Decision Systems (Expert Systems).

- BCS 313b System Design and Development 3-3-0**
This course combines concepts and practices in business information systems development. The entire process of MIS development will be studied: the feasibility study, structured analysis techniques, data file modelling and normalizing, database schema definition, implementation strategies, security and maintenance constraints. To emphasize the concepts covered in class, a MIS prototype will have to be developed using a DBMS such as PARADOX. A case study approach will be used.
Prerequisite: BCS 220

BCS 314b **Advanced Visual Basic** **3-3-0**
This course will expose students to some more advanced features of Visual Basic.NET such as the Object Model, Threads, the Graphic Utilities and ASP Net for creating web applications. The programming tasks will be taken from the domains of Operations Research and Information Management. Each student will have to complete a programming project from conception to actual demonstration of a running program. Project management will be inspired from practice in industry.

Prerequisite: BCS215 or CSC111

BCS 315b **Multimedia Modelling** **3-3-0**
This course concerns the need to communicate efficiently on the web using texts, images, sounds, videos, etc. Multimedia communication will be treated as a language with rules to be observed (logical, aesthetic, etc.). In addition to covering the creation of various graphics, animations, videos, sound types and effective user interactions, the course will emphasize the application of a rigorous design methodology (from story boarding to experimentation). Students will be responsible for designing applications that enhances or highlight a commercial product of service. The evaluation criteria will be functionality, meaning, consistency, interestingness, originality.

BCS 316a **Internet Technology** **3-3-0**
This course covers the most common alternatives to setting up an on-line store. This involves the setting up of a web server using the HTTP transfer protocol GET and POST requests, sockets, server side processing of client requests using the cgi-perl, php, java servlet, Asp, Jsp and Soap technologies. The modelling of a product catalogue and shopping cart will be based on the standards XML, DTD, XML schema, XSLT.

Prerequisite: BCS215 or CSC 111

BCS318 **E-Business Applications** **3-3-0**
With the high increase of use of the World Wide Web and the Internet, the new Business Intelligence (BI) concept emerges. The business problem that originates the development of BI concept is that data is available in different places (different countries) and in different formats (text, video, paper...) and businesses need to compile all these types of data in order to develop intelligence and make decision. This course focuses on the technological infrastructure needed for implementing e-Business solutions, on the software components necessary, and on how to implement such applications.

Prerequisite: BCS 212

FINANCE COURSES

BFN 201ab **Finance I** **3-3-0**
This is a survey course introducing students to the key concepts in Finance. Topics to be covered include net present value, valuation models of financial assets, portfolio theory, the efficient market hypothesis, classical theory of interest, and the term structure of interest rates.

Prerequisites: BAC 121 and BMA 140, ECO 103

BFN 203ab **Finance II** **3-3-0**
This course represents an introduction to corporate finance. It focuses on the determinants of financial policy at the microeconomic level. The students will become familiar with the issues and challenges faced by a financial manager. Emphasis will be placed on financial planning and corporate growth, capital structure, and dividend policy decisions.

Prerequisite: BFN 201.

BFN 210ab **Capital Markets** **3-3-0**
The emphasis in this course is on domestic and international capital markets — stocks, bonds, foreign currencies, etc. Whereas Finance I and Finance II concentrate on internal financial decision making, this course surveys the external environment in which the firm operates. Managers need to know how to satisfy investors' demands and obligations in order to meet their external needs for capital resources. Students interested in a career as a money manager, research analyst, investment sales and virtually any occupation involved with the investment management process should consider this course. Topics will include the efficient market hypothesis, analysis of fixed income and equity securities, derivatives and principles of portfolio management.

Prerequisite: BFN 201. This course is required for students in the Finance stream. BFN 210 may be taken concurrently with 300 level finance courses except BFN 352 and BFN 315.

BFN 301a **Capital Budgeting** **3-3-0**
This course describes how managers are making long-term investment decisions involving capital assets, such as plant, equipment, machinery, research and development, etc. The main topics include, but are not limited to net present value, internal rate of return, cost of capital, adjusted present value, real options, mergers and acquisitions, and many others. Special emphasis is placed on tackling complex case studies that require an integrative approach to understanding various corporate finance issues.

Prerequisite: BFN 203

BFN 315a **Financial Derivatives** **3-3-0**
Futures and options markets have become increasingly important in the world of finance and investments. It is essential that all professionals understand how these markets work, and how derivatives are valued. This course will study the derivatives markets, assess their characteristics, and describe how they are used by hedgers, speculators and arbitrageurs.

Prerequisites: BFN203, BFN210

BFN 340 **Risk Management in Financial Institutions** **3-3-0**
The financial management of financial institutions such as commercial banks, investment dealers and insurance companies is strongly focused on the management of different types of risk. These risks include credit risk, market risk, liquidity risk and operational risk. This course provides a conceptual framework for understanding modern models of risk management in financial institutions and examines the choices made by institutions with regard to risk bearing and management. The financial institution of primary focus will be the commercial bank.

Prerequisites: BFN203, BFN210

BFN 341 **Corporate Governance** **3-3-0**
Corporate Governance offers insights into the relationship between economic efficiency and economic organization. The main issues addressed in this course include the comparative analysis of free markets and hierarchies, the nature and allocation of financial claims, the organization and functioning of various corporations around the world, and the connection between ethics and economic performance.

Prerequisites: ECO102, BFN203

BFN342 **Theories of Finance** **3-3-0**
The main focus of this course is to survey and discuss various theories that constitute the foundations of modern finance. These theories include, but are not limited to Rational Behavior, the Efficient Market Hypothesis, Behavioral Finance, and Game Theory. A special emphasis will be placed on emerging paradigms, such as Fractals, Complex Systems, and Chaos Modeling.

Prerequisites: BMA141, BFN210

BFN 351a **Financial Statement Analysis** **3-3-0**
A detailed analysis of financial statements as an aid to making investment decisions. The differentiation between economic income and accounting income and impact of different accounting principles on corporate earnings are discussed.

Prerequisite: BFN 203, BFN 210, BAC 122

BFN 352a **Investment Analysis and Portfolio Management** **3-3-0**
Introduction to the various security instruments and intermediaries and the structure and functioning of the markets within which they are cast. Conventional techniques for evaluating securities, including technical analysis. The construction of a portfolio by traditional diversification, randomized selection and efficient diversification methods.

Prerequisite: BFN 203, BFN 210

BFN 354b **Seminar in Finance** **3-3-0**
Selected topics will be chosen from contemporary issues in Financial Theory, Corporate Finance, and Domestic and International Capital Markets. The specific topics will be dependent upon the timeliness of the issue and student background and interest. A portion of the seminar will be conducted in the case method.

Prerequisites: permission of the instructor.

BFN 356 SEED Portfolio 6-3-0
The SEED course has been designed with the objective of providing finance students with the means to practically apply their knowledge. The course gives students the opportunity to act as investment managers, in order to gain a more comprehensive understanding of portfolio management. This will be accomplished by having students invest in recognized North American equities, after prudent research and consulting with an external advisory board.

Students will apply to the program upon entering their penultimate year. After an application process which includes resumes, transcripts and interviews, six students will be selected as Research Assistants. The responsibilities of a Research Assistant include maintaining records and following the progress of the portfolio. Upon completion of a year as Research Assistants, students will move into the position of Portfolio Managers, conditional upon the approval of the Faculty Advisors. Portfolio Managers will be responsible for making buy and sell decisions as well as keeping detailed records of transactions. Emphasis will be on the importance of analysis and presentation, in order to reach consensus among Portfolio Managers, and on the use of appropriate decision making tools.

Prerequisite: Permission of instructor.

BFN 360a International Finance 3-3-0
This course provides a broad overview of the major aspects of finance in an international setting. The focus will be on measuring and coping with foreign exchange risk from the managerial perspective of multinational corporations. The main topics of this course include the examination of spot, forward and futures markets, the use of derivative contracts, international financial markets, international financing, capital budgeting, direct foreign investment and international mergers and acquisitions.

Prerequisite: BFN 203, BFN 210

HUMAN RESOURCE MANAGEMENT COURSES

BHR 221ab Organizational Behaviour 3-3-0
This course is designed as an introduction to the study of individual and group behaviour in organizations. The purpose is to enable students to understand human behaviour and its determinants in the organizational setting and, therefore, to deal with it effectively. Throughout the course emphasis will be placed on students' conceptualization of the theoretical aspects of organizational behaviour, as well as the practical application of these theories through case analyses.

Prerequisite: BMG 112

Note: Students who complete BHR221 cannot receive credit for PSY309. For prerequisite purposes PSY309 is equivalent to BHR 221.

BHR 224ab Human Resource Management 3-3-0
This course is designed to introduce current theory, research and practice in Human Resource Management, since management of people within the organization has become a recognized source of competitive advantage. In addition to covering the traditional Human Resource Management topics (recruitment and selection, training, compensation, performance management, etc.), this course also examines current trends and issues in Human Resource Management. Learning is facilitated through lecture, student presentations, and class discussions.

Prerequisite: BHR 221

Note: All students in a Human Resource Management stream must take this course.

BHR 312a Industrial Relations 3-3-0
The subject matter of industrial relations is the interdisciplinary study of people and their work. Through an integration of theory and practice, the objective of this course is for students to gain an initial ability to analyze, understand, and manage many of the major issues of the employment relationship in the contemporary workplace. Topics addressed include the following: the broad, legal economic social and historical context of industrial relations; the theory and practice of trade unions; unionization in the public sector; and labour and employment law.

Prerequisite: BHR 224 or POL 214

BHR 313b Compensation Management 3-3-0
This course provides students with an understanding of the strategic role of organizational compensation management in today's competitive environment. Students will explore the theory, concepts and methods used to design compensation systems which will contribute to individual and organizational goal achievement. Current and controversial topics in the field of Compensation Management will also be discussed.

Prerequisite: BHR 224

BHR 315b Training and Development 3-3-0
The course introduces students to the practice of training and developing employees. Both practical and theoretical aspects are explored. The entire process of training is explained, from the determination of training needs, setting training objectives, designing the training programs, selecting the appropriate training and development techniques, to the evaluation of training results. Both traditional and contemporary training methods are reviewed within this framework.

Prerequisite: BHR 224

BHR 316b Organizational Conflict and Negotiation 3-3-0
This course introduces students to the structure and processes of conflict and negotiations faced by organizations. Both formal and informal conflict and negotiation practices at the interpersonal, intra group and inter group levels are examined from theoretical and practical perspectives. Particular emphasis is placed on understanding and dealing with conflict from a "conflict management" viewpoint wherein conflict is viewed as having the potential for positive and negative individual/organizational consequences. A significant portion of the course is devoted to the development of conflict management and negotiation skills.

Prerequisite: BHR 221

BHR 321 Organization Theory 3-3-0
Organizations, the dominant form of institution in our society, are a fundamental part of our existence, present in all forms of contemporary life. It is the purpose of this course to study the design and structure of organizations. The subject is approached from both a theoretical and strategic perspective. It also examines how organizations can be structured and designed to facilitate goal achievement and to improve effectiveness.

Prerequisite: BHR 221

BHR 325 Topics in Human Resource Management 3-3-0
The course will present selected topics of current interest at an advanced undergraduate level. Topics covered may vary from year to year. Subject matter may reflect current research interests of faculty members. This course should be of particular interest to those expecting to pursue graduate studies in Human Resource Management and related fields.

Prerequisite: BHR 224

BHR 326a Personnel Recruitment and Selection 3-3-0
This course introduces students to the theory and practices of personnel recruitment and selection. In addition to critically reviewing the various recruitment and selection strategies used by organizations, students will be exposed to the technical and theoretical underpinnings of the field (e.g., Validity; Reliability; Criteria Measures). The course will cover selection and recruitment issues as they relate to the Canadian legal framework.

Prerequisites: BHR 224, BMA141 or PMA260

BHR 328a Occupational Health and Safety 3-3-0
This course is designed to provide students with an introduction to the management of health and safety in the workplace. The course first examines the legislative context, and the hard and soft cost implications of effective health and safety programs. In this context, best practices in terms of occupational hygiene, safety, ergonomics, and workplace wellness are explored. Related topics such as accident investigation, workplace safety and insurance, and occupational disability management are also discussed.

Prerequisite: BHR 221

BHR 330 International Human Resources 3-3-0
Globalization has compelled organizations to increasingly deal with a diversified workforce, a workforce with different cultural values. As well these organizations are required to meet different human resource regulations imposed by host governments and labour unions. They are required to coordinate and integrate their global human resource practices. The objective of the course is to provide students with the knowledge, skills and abilities necessary to manage human resources in global organizations. The course includes discussion of the HR challenges in multinational companies, the HR functions of recruitment, selection, compensation, training and development, cross cultural performance evaluation, as well as host country industrial relations.

Prerequisites: BMG 215 and BHR 224

BHR 333b Employment Law 3-3-0

This course is designed to provide students with an understanding of the key statutes, case law, and adjudicative processes in employment law. Whereas students will be introduced to the theory of public law and administrative tribunals, emphasis will be placed on the practical implications of the legal rights and obligations of the workplace parties. Topics will include the law of the following: human rights; employment standards; occupational health and safety; workplace accident insurance; pay equity; and, employment equity.

Prerequisite: BHR 224

BHR 334b Administering the Collective Agreement 3-3-0

The collective agreement constitutes the negotiated terms and conditions of employment between management and the union. Through an integration of theory and practice, students gain an understanding of the major substantive and procedural issues in administering a collective agreement. An emphasis is placed on dispute resolution from the initial stages of a grievance through to labour arbitration.

Prerequisites: BHR 224 or POL 214

BUSINESS MATHEMATICS COURSES

BMA 140ab Statistical Analysis for Business Decisions I 3-3-0

Data summarization: frequency distributions, measures of central tendency and variability; probability; introduction to statistical decision analysis; discrete probability distributions: binomial, Poisson probability distributions; continuous probability distributions: normal, uniform and exponential probability distributions.

Prerequisite: Math 195ab

This course is not open to students with credit for EMA 140.

BMA 141ab Statistical Analysis for Business Decisions II 3-3-0

Sampling methods and sampling distributions; statistical inference; estimation and hypothesis testing; simple linear regression and correlation; multiple linear regression; chi-square tests for independence and goodness-of-fit; introduction to analysis of variance.

Prerequisite: BMA 140

This course is not open to students with credit for EMA 141.

BUSINESS MANAGEMENT COURSES

BMG 112ab Management Theory & Practice 3-3-0

This course serves as an introduction to the basic theory, science and practice of management. It views management as a process, stressing the basic processes of managerial planning, organizing, controlling and leading. The material is presented from a theoretical or formal point of view but with emphasis on practical examples. The 1-credit lab ILT 100 is to be taken concurrently with BMG 112.

ILT 100 Information Literacy and Critical Thinking (Lab) 1-0-1

The objective of this laboratory course is to introduce students to the skills necessary to effectively complete their research assignments. The course includes the correct use of library resources including the online catalogue, periodical indexes and other relevant databases. Other areas of study include the identification of key terms for effective searching, productive use of the internet and the critical evaluation of retrieved resources. Academic integrity, plagiarism and the correct citation of print and online sources are also taught. The course is practical, and students are given the opportunity for hands-on experience in the library's electronic classroom. Taught in conjunction with BMG 112, students retrieve the resources necessary to complete their assignments for this management course. This lab course cannot be used as a lecture course credit.

BMG 215ab Introduction to International Business 3-3-0

This introductory course is designed to expose the student to the international business environment and its current patterns. The major theories of international business transactions are examined including the critical institutions that influence and facilitate international trade. These dynamic factors as well as the pressures of globalization are reviewed in the context of overall corporate policy. The course also briefly develops the important international issues within the framework of the various functional disciplines of management.

Prerequisites: BMK 211, BMG 112

BMG 221a Business Law 3-3-0

In addition to the fundamentals of basic contract law, students will be introduced to a number of legal issues affecting contemporary business including: competition policy, environmental law, securities legislation, fiduciary responsibilities, property law, professional liability and consumer protection.

BMG 222b International Business Law 3-3-0

This course is designed to give students a practical knowledge of the legal aspects of engaging in international business. Students will examine major public trade agreements that have a direct effect on international business, such as GATT and W.T.O., The New York Convention (arbitration), The Vienna Convention (International Sale of Goods), NAFTA, and the European Common Market. The practical aspects of international business will be covered in detail. Notably, the following topics shall be studied; the formation of the contract, conduct of business, the carriage of goods, insurance, payment, financing and the resolution of disputes.

Prerequisite: BMG 215

BMG 230 Business Research Methods 3-3-0

The course focuses on the analysis of actual problems in organizations and the use of research in problem solving. This encompasses the understanding and application of appropriate research methodologies.

Prerequisite: BMA 141

BMG 311ab Business Policy and Strategic Management 3-3-0

The objective of this course is to introduce students who have completed their B.B.A. core courses to the business policy and strategic management areas. This course attempts, through the uses of cases, readings and lectures, to provide an awareness of overall organizational goals, strategies and environmental relationships. Where possible, the course utilizes knowledge gained in other areas of the B.B.A. program.

Prerequisite: All other Required Core courses

BMG 312a Competitiveness 3-3-0

The objective of this course is to provide students, who have completed three credits of Business Policy, with an opportunity to examine in greater depth a number of important managerial issues relating to sustaining a competitive advantage. The course will examine competitiveness on various levels of aggregation: national, industry, company and individual.

Prerequisite: BMG 311 or permission of instructor.

BMG 315ab International Management 3-3-0

The course is designed to further develop the students' understanding of the international business environment. The course reviews the global competitive forces affecting the internationalization process including the decision to expand abroad and the various modes for foreign market entry i.e. licensing, joint ventures and international alliances. Other topics include various aspects of international control, organizational structure and foreign subsidiary issues. The course is developed around the case study method.

Prerequisite: BMG 215

BMG 322b Change Management 3-3-0

This course explores the process of change within organizations and the management of that process. Topics include the forces that create and inhibit change, decisions about what needs to be changed, and the techniques to implement and sustain change. The role of the change agent will also be examined.

Prerequisite: BHR221

Note: It is recommended that students take this course in their last 30 credits.

BMG 323ab Interpersonal Skills 3-3-0

Studies consistently show that good "interpersonal skills are critical to managerial success." Although individuals differ in their basic characteristics, personalities, and competencies, better interpersonal skills can be learned. This course uses both conceptual and experiential approaches to focus on key interpersonal skills of communication, conflict management, and leadership, within a team setting.

Prerequisite: BHR 221

BMG 324a Management of Innovation 3-3-0

The course is designed to introduce students to the innovation process, the management of the innovation process within the organization, and the role and treatment of innovation in the Canadian context.

Prerequisite: BHR221

BMG 351ab Independent Studies 3-3-0

Proposals for independent studies should be submitted to the faculty member who is to supervise the project. All such studies must be approved by the Department.

BMG 352 Honours Project 6-3-0

The Honours project will be taken by all students accepted by the Department into the BBA Honours program. The student will select a topic in consultation with a professor in the concentration area. The completed project will be reviewed by three professors, two of which must be in the area, and be subject to an oral defence.

Prerequisite: acceptance in the Honours program

BMG 391	Co-operative Placement I	3-0-0
Students will integrate theory and practice through the analysis of an issue, opportunity or problem in some way related to the student's work placement. <i>Prerequisite: Admission to the Co-operative Education Program</i>		
BMG 392	Co-operative Placement II	3-0-0
Students will integrate theory and practice through the analysis of an issue, opportunity or problem in some way related to the student's work placement <i>Prerequisite: BMG391</i>		
BMG 393	Co-operative Placement III	3-0-0
Students will integrate theory and practice through the analysis of an issue, opportunity or problem in some way related to the student's work placement. <i>Prerequisite: BMG392</i>		
BPH 240ab	Business and Professional Ethics	3-3-0
An examination of ethical issues and responsibilities in the field of business, surveying contemporary and traditional ethical theory and undertaking case study of contemporary issues. <i>Prerequisite: Students must have completed a minimum of 30 credits at Bishop's University.</i> <i>Note: This course is cross listed as PHI240. Students who receive credit for BPH240 cannot receive credit for PHI240.</i>		

BUSINESS ENTREPRENEURSHIP COURSES

BMG 214ab	Introduction to Entrepreneurship: New Venture Creation	3-3-0
This course requires students to examine the entrepreneurial process from conception to the implementation of a new venture. It concentrates on the attributes of successful entrepreneurs and entrepreneurial teams, on their search for and assessment of opportunities and on gathering of resources to convert opportunities into businesses. Students will work in teams to prepare a detailed business plan and compete for the David Ritzenhouse (fall semester) and P.H. Scowen (winter semester) prizes in entrepreneurship. <i>Note: This course is open to all Bishop's University students.</i>		
BMG 318ab	The Successful New Venture: Feasibility Analysis and the Management of Risk	3-3-0
Students will be introduced to the process of early stage business growth planning and feasibility. Students will work on a team project to apply analysis tools and recommendations in a "live" entrepreneurial business situation with a local business. The team will be coached throughout the process and present their findings and recommendations to the entrepreneur. The outcome for the student team is the understanding of the true entrepreneurial challenge and reality. Field work is supplemented by classroom lectures that further enhance the students' grasp of small business development <i>Prerequisite: BMG 214</i>		
BMG 328ab	Business Planning and Startup Strategies	3-3-0
In this course students will work in teams of two to study another live case with a company that is further along in its growth than in BMG318. The experience will be more in depth and the application of solutions more precise in these cases. The continuation of the BMG318 experience provides the repetition that breeds familiarity and the action-orientation required for life after Bishop's. Class lectures are centered on the mid-growth challenges experiences by companies after they have survived their first three to five years in business. <i>Prerequisite: BMG 318</i>		

MARKETING COURSES

BMK 112ab	Consumer Behavior and Introduction to Marketing	3-3-0
To understand how consumer and organizational needs are satisfied; how firms create and deliver products and/or services at a profit from a managerial, global and online perspective.		
BMK 211ab	Marketing Management	3-3-0
Introduction to the nature of marketing in our competitive business environment. The main emphasis of the course evolves around a close examination of the "marketing mix" (product, price, place and promotion) in a managerial setting, and interpretation of market forces and opportunities. <i>Prerequisite: BMK 112</i>		

BMK 312	Consumer Behavior II	3-3-0
This course will explore the realities and implications of buyer behavior in traditional and e-commerce markets. Furthermore, this course will provide students with an opportunity to apply relevant theories from Marketing, Sociology, and Psychology and utilize this information in understanding buyer behavior and how it can help improve strategic decision making. <i>Prerequisite: BMK 211</i>		
BMK 321a	Marketing Research	3-3-0
The course focuses on the analytical techniques used to interpret data acquired using research techniques discussed in BMG 230. The emphasis in the course is on interpretation of results of marketing research and the use of such information to facilitate strategic marketing decision making. <i>Prerequisite: BMK 211, BMG 230</i>		
BMK 323a	Marketing Communication	3-3-0
This course will examine the theory and techniques applicable to all the major marketing communication functions: advertising, direct marketing, sales promotions, public relations, and personal selling. It will provide a knowledge base that will allow students to research and evaluate a company's marketing and promotional situation and use this information in developing effective communication strategies and programs. <i>Prerequisite: BMK 211</i>		
BMK 332a	Marketing Channels	3-3-0
This course views marketing channels as a key strategic component of the marketing mix and builds an understanding of how the firm can best maximize its position with respect to its environment. Key concepts include the types of participants in marketing channels, channel structures, functions and flows, and the various behavioural processes which exist. The course examines how the firm can best maximize its strategy to influence these factors through strategic channel design, building good networks and alliances and, finally, by understanding how to motivate members of the channel. <i>Prerequisite: BMK 211</i>		
BMK 340	Product Strategy and Innovation	3-3-0
This course focuses on the nature of the decisions and actions taken by firms concerning innovation with respect to their products and services. Topics covered will include innovation and R&D management, managing knowledge and networks, and the new product development process. The course will expose students to the contemporary challenges encountered by innovative firms in developing and launching new products and services, and the strategies which are used by those firms in building and defending brand equity throughout the product life cycle. <i>Prerequisite: BMK 211</i>		
BMK 350	Marketing Strategies for Environment Sustainability	3-3-0
This course aims to provide a forum for students to consider innovative approaches to advancing environmental sustainability through the marketing function of organizations. The course is designed to help students build effective strategies for gaining competitive advantage through environmentally sustainable practices which need to be built into the core areas of strategic marketing: product and process development, design of the supply chain, communications and pricing. In addition, the course will help students understand the publics which need to be involved and the macro factors which need to be considered in order for such strategies to be effective. <i>Prerequisites: BMK211</i>		
BMK 354ab	Topics in Marketing	3-3-0
The course will present selected topics of current interest at an advanced undergraduate level. Topics covered may vary from year to year and will reflect current research interests of marketing faculty members. <i>Prerequisites: BMK 211</i>		
BMK 362ab	Sport Marketing	3-3-0
This course will illuminate the theoretical underpinnings and practical applications of marketing strategies to collegiate and professional sport, special events, international sport, broadcasting, facility management, and sporting good industry. The course is designed to allow students an opportunity to apply key marketing concepts and strategies within various settings in order to garner a better understanding of both participant and spectator markets. <i>Prerequisite: BMK 211</i>		

BMK 371 Industrial Marketing Strategy 3-3-0

This course is designed to help students understand the complexities and unique challenges faced by marketing managers and top management in their efforts to harmonize the organization's objectives, capabilities, and resources with marketplace needs and opportunities, in the specific case of industrial or business-to-business marketing. Particular emphasis is placed on high technology and dynamic environments which drive specific industries that play key roles in today's society including, but not limited to, biopharmaceuticals, nanotechnology, integrated networks and energy.

Prerequisite: BMK 211

BMK 372a International Marketing Strategy 3-3-0

The focus of this course is primarily on the formation or revision of strategies related to consumer and competitive analyses in international markets. Exploration and understanding of international markets will be facilitated utilizing a social, legal, economic, political and technological framework. This information will be used jointly with competitive and industry scanning to forecast, segment, position and target within international markets and to highlight the inherent challenges of international market research. Strategic decisions faced by students assuming the role of marketing managers include channel analysis and deployment (modes of new international market entry, logistics), in addition to the challenges of pricing, promotion and product development on an international scale.

Prerequisite: BMK 211 and BMG215

BMK 381b Marketing Policies 3-3-0

This course integrates the marketing elements in an overall business approach and is designed for graduating students in a marketing stream. Special consideration will be given to the playing of a realistic marketing simulation game.

Prerequisite: BMK211 + 6 Marketing concentration credits.

MANAGEMENT SCIENCE COURSES

BMS 231 Operations Management 3-3-0

This course views the management of operations as the design, management and control of business processes. The course introduces the decisions and trade-offs associated with production of goods and services. Topics include: strategy in operations and supply chain, process design and selection for manufacturing and services, capacity planning, six-sigma quality, lean manufacturing, inventory management, aggregate sales and operations planning, MRP/JIT, and scheduling operations.

Prerequisite: BMA 141

BMS 303a Forecasting Techniques 3-3-0

This course introduces various forecasting techniques used in the business world. Computers are used to apply and interpret the forecasting information.

Prerequisite: BMS 231

BMS 325b Operations Research 3-3-0

This course introduces more concepts and applications of quantitative management techniques not covered in BMS 231. Topics to be covered are: linear programming; the simplex method; simplex-based sensitivity analysis and duality; integer programming; introduction to dynamic programming; queuing models; and Markov processes. Computer programs are available for students to experiment with specific techniques.

Prerequisite: BMS 231

BMS 331a Production and Operations Management 3-3-0

This course introduces managerial production techniques such as: resource planning (requirements planning, capacity planning, facility planning); facility location and layout (facility layout and design of product layouts, assembly-line balancing); aggregate production planning and master scheduling; material requirements planning; operations scheduling; project planning management (planning and scheduling project costs, controlling project costs). Computer programs are available for students to experiment with specific techniques.

Prerequisite: BMS 231 or instructor's permission for non-business students.

BMS 332b Supply-Chain Management 3-3-0

The main purpose of the course is to learn how models can be effectively constructed and applied to supply-chain planning problems. Specific topics include: Motivation for using models to analyze supply chain problems with particular attention to developments in Information Technology, Linear and mixed Integer programming models, applications of modelling systems to strategic, tactical, and operational supply chain problems. The perspective is the resource-view of the firm, a new paradigm for strategic planning.

Prerequisite: BMS 231

BMS 333 Purchasing Management 3-3-0

In today's competitive business climate, companies with effective procurement strategies are beginning to separate themselves from the competition. Increasingly companies are outsourcing their production; as a result there is a transformation from a manufacturing to service based economy. This course brings together the fields' tools and latest advances, and gives the students and professionals a comprehensive framework for innovative procurement- lowering costs, efficient logistics, quality testing, warehousing, improving efficiency, eliminating non-value added activities and optimizing the purchase order function.

Prerequisite: BMS 231

BMS 341b Statistical Quality Control 3-3-0

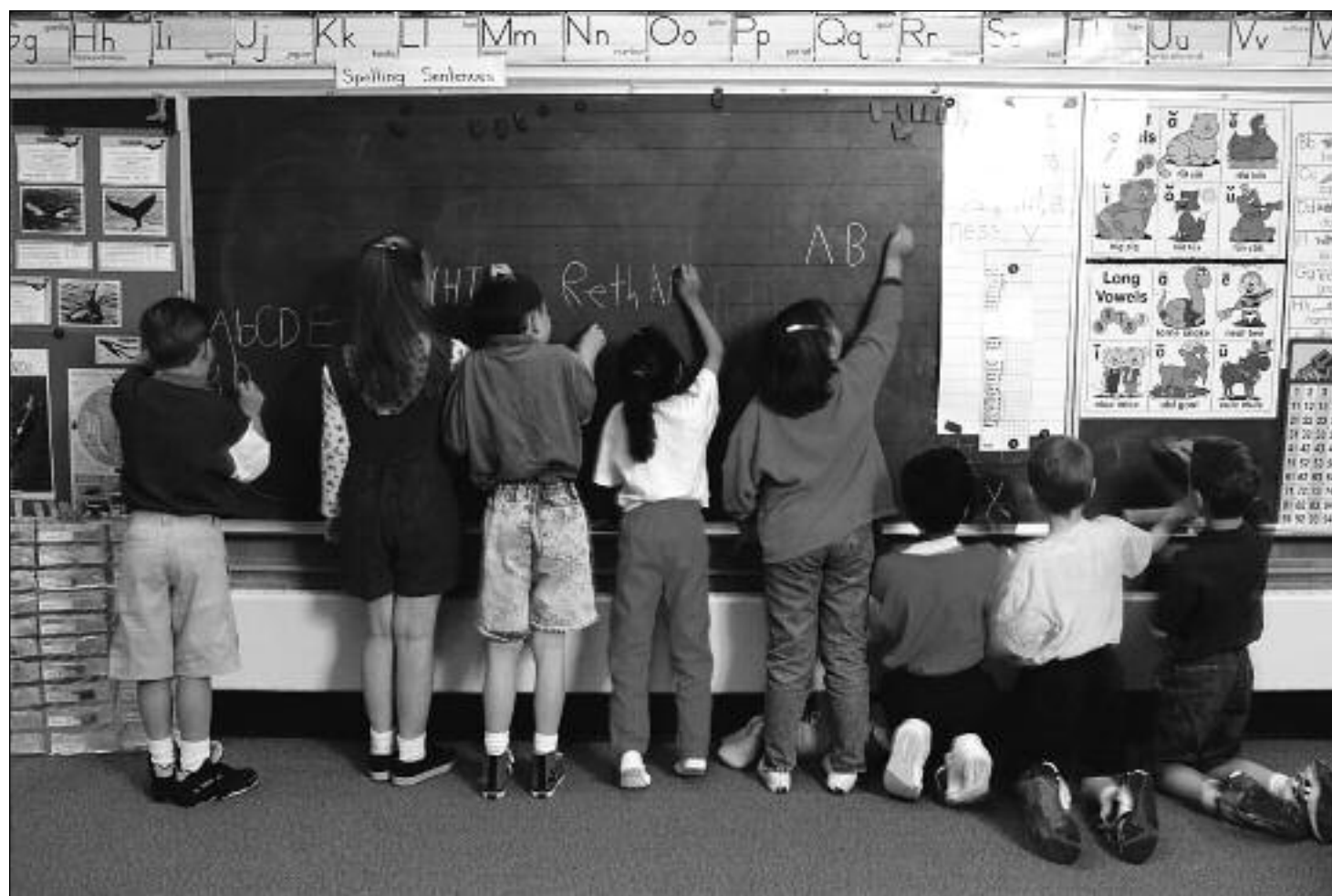
This course introduces the student to topics in quality control. It will deal with the different techniques of design for single, double, multiple and sequential acceptance sampling plans; sampling plans design for stipulated producer's risk and/or consumer's risk; rectifying sampling plans; control charts for variables and for attributes.

Prerequisite: BMA 141

BMS 343b Computer Simulation 3-3-0

The course studies computer simulation techniques to support managerial decision making. The focus will be on the formulation of relevant, tractable questions, the development of computer based models to provide appropriate information, and the analysis of this information for decision making. Students will be encouraged to see simulation as an integrated subject, by developing a real case model.

Prerequisite: BMA 141



The School of Education

Teacher Education has been an important part of Bishop's tradition since lectures were first delivered to seven aspiring teachers in 1898. Today, graduates are teaching in all parts of Canada, in the United States and overseas but special emphasis is given to preparing students to teach in English schools in the province of Quebec.

The Bishop's School of Education offers a two-step track leading to teacher certification as well as graduate programs for practicing educators.

Mission Statement

As a teaching and learning institution, the Bishop's School of Education, in collaboration with the greater educational community, is dedicated to developing reflective and exemplary educators. Graduates of the Bachelor of Education program will be prepared to assume leadership roles in education as a result of both a theory based and a practice-oriented course of studies founded on the principles of social responsibility and respect for individual dignity.

General Information

Undergraduate Studies

The first step is an undergraduate program (three years for Quebec students or four years for students coming from outside Quebec) which includes two options:

- preparation for teaching at the elementary level (Elementary Teacher Education Program) resulting in a B.A. in Educational Studies
- preparation for teaching at the secondary level (Secondary Teacher Education Program) resulting in a B.A. or B.Sc. with a Double Major: Education and a teaching discipline.

Students in both secondary and elementary programs will be required to pass the English Exam for Teacher Certification (EETC) approved by the Ministry prior to the third-year practicum. Success on this test is a requirement for progression through the program. Information about the cost and the procedures for this test are available from the School of Education.

The second step is a one-year, 36-credit Bachelor of Education program which, upon successful completion, results in teacher certification in the Province of Quebec. Prior to certification, students will be subject to a check on their judicial background by the Ministère de l'Éducation, du Loisir et du Sport.

Students who have completed an initial degree in a discipline other than Education either at Bishop's or another university requesting entry into the Bachelor of Education program may require at least two to three years to complete the course of studies, depending on their academic record.

Students wishing to follow degree-credit programs in Education must obtain permission to enroll from the Admissions Office of the University.

Admission to the second step, the Bachelor of Education program, is granted by the School of Education according to their established criteria.

Application information as well as admission and program criteria are listed in the Admission and Registration section at the beginning of this Calendar. Please note that the School of Education does not normally admit students in the Winter semester.

Graduate Studies

Certified teachers, educational administrators and those with a first undergraduate degree may make application to graduate programs leading to a Master of Arts in Education, or Master of Education in Educational Leadership, Curriculum Studies or Art Education. (A Certificate in Teaching English as a Second Language and a Principal's Professional Certificate are offered on demand.)

Requirements for entrance into graduate programs in Education at Bishop's University are as follows.

Applicants for the M.A. and M.Ed. Concentrations in Curriculum Studies and Educational Leadership must:

- have completed a B.Ed. or equivalent at a recognized university with an average of at least 75%;
- normally have at least two years of relevant educational experience (teaching or related professional experience)

Applicants for the M.Ed. in Art Education must:

- have completed a relevant undergraduate degree at a recognized university with an average of at least 75%;
- normally have at least two years of related professional experience

Specific requirements for M.A. and M.Ed.

Students must submit a one-page description of their research interests, including area of interest, initial research questions, approach (e.g. case study, classroom study), possible resources required (e.g. access to specialised computer technologies, special schools and/or populations), and an approximate time line for completing the program.

Students in Art Education must also submit a representative selection of recent art work.

Because the resources of the School of Education are limited, potential students should be advised that the School reserves the right to refuse admittance to a student whose research interests do not coincide with those of existing faculty for supervision purposes, or if the resources required are not readily accessible.

It is recommended that students complete the program within six years. After six years all students who have not completed the program will be required to meet with the Chair of the School of Education or the Graduate Programs Coordinator to reassess their progress.

Students who have not registered for a course or for their thesis for two years will be withdrawn from the program and must reapply.

Students who are registered but inactive for a period of three years will be removed from the program.

Application information and admission and program criteria for the graduate programs in Education are listed in the Admissions and Registration section of this Calendar.

Costs

In addition to the costs listed in the Fees section of this Calendar, students are responsible for all travel and accommodation costs related to the required student teaching practica in the Elementary Teacher Education Program, Secondary Teacher Education Program or Bachelor of Education degree.

General Regulations

1. Academic Standing for programs in Education:

Notwithstanding the University regulations on Academic Standing, the School of Education has its own regulations on Maintenance of Good Standing.

B.A. or B.Sc. Double Majors, B.A. in Educational Studies

Students entering the first step of the program must maintain a cumulative average of 70% or more to remain in good standing. Once students have completed two academic semesters, their averages will be calculated on all courses attempted. Failures will be included in the calculation of this average. If a failed course is repeated, or if a passed course is repeated to achieve a higher mark, the second attempt in either case will be used in the cumulative average.

After two semesters, students with cumulative averages less than 50% must withdraw from the program; those with cumulative averages between 50% and 69% will be permitted to remain in the Education program for one semester on probation in which they must improve their cumulative average to 70%. Students who do not achieve that standard will not be eligible to continue in the Education programs at Bishop's University. Students have the right to appeal this decision to the Appeals Committee of the School of Education.

Students who fail to maintain good standing in the School of Education will be required to withdraw from the Education program and will not be eligible to transfer back in to an Education program. They must make a choice of an alternate degree program at the university by the end of two consecutive semesters following their withdrawal. Should they fail to do so or to be accepted into an alternate program, they will not be permitted to register as full-time students in the next semester.

Bachelor of Education

Students applying to the Bachelor of Education program after their B.A. or B.Sc. require a cumulative average of 70% or more.

Students in the B.Ed. program must maintain a cumulative average of 70% or more and have successfully completed the required practica in order to graduate with a B.Ed.

** A student who fails to maintain a cumulative average of 70% prior to the final practicum will be compelled to withdraw from the Bachelor of Education program and will not be permitted to register for the final practicum.*

2. Brevet d'enseignement (Teaching Certificate):

Students who have successfully completed all academic and practicum requirements of their program will be eligible to apply for the Quebec Brevet d'enseignement (Teaching Certificate).

The Ministère de l'Éducation, du Loisir et du Sport requires a Declaration concerning a judicial record prior to certification.

3. Practica (Student Teaching)

Students must successfully complete the requirements of all practica components in order to complete the B. Ed. with a recommendation to the Ministère de l'Éducation, du Loisir et du Sport of Quebec for the "brevet d'enseignement". The practica components are evaluated as follows:

- The Introduction to Professional Practice (Edu 115/116): numerical grade
- The Reflective Practicum (Edu 215/216): (P) pass or (F) fail.
- The Professional Practice Practicum (Edu 328/329): (P) pass or (F) fail (Access to the third-year practicum is dependent on successful completion of the English Exam for Teacher Certification.)
- The Internship (Edu 428/429): (P) pass or (F) fail.

Students completing the Introduction to Professional Practice (Edu 115/116), Reflective Practicum (Edu 215/216), and Professional Practice (Edu 328/329) practica and receiving a failing numerical grade or grade of F, may only be permitted to continue in their School of Education program with the School's approval. In the case of a failure in the Internship (Edu 428/429), the student must withdraw from the Bachelor of Education program.

Students removed from any practicum course before its completion as a result of an unsatisfactory report submitted by an associate teacher, school principal or university supervisor risk being withdrawn from the program. Final decisions regarding removal from the program rest with the School of Education. Cases of this kind will be referred to the School's Review Committee for a decision regarding continuation in the program.

Placements are made in schools throughout the province according to criteria established by the School of Education. Student teachers may have additional travel and accommodation costs during a practicum.

Further information and regulations concerning Practice Teaching are contained in the Educational Partners' Handbook.

4. Transfer Credits

Students may obtain advanced credits for courses which meet the teaching subject requirements and for courses which have appropriate content and meet program requirements.

5. Residency Requirements

Students must normally complete a minimum of 36 credits in Education at Bishop's University as students in the B.Ed. program, which includes the practicum.

6. Distinctions

To be awarded a B.Ed. degree with distinction, students must not only achieve first class academic standing in their courses, (cumulative average of 80% or more) but must also perform at a highly successful level in all practica as evaluated by the Dean of the School of Education in consultation with the Director of Practice Teaching and faculty members who have supervised the student's practica.

7. Review Committee

Students encountering difficulty in practicum placements or in academic courses may be required to meet with the Review Committee of the School of Education for recommendations or decisions regarding their situation.

Secondary Teacher Education Program

The Secondary Teacher Education Program at Bishop's University is a two step program leading to two degrees, a Bachelor of Arts (B.A.) or a Bachelor of Sciences (B.Sc.) with a Double Major (Education and a teaching discipline) and a Bachelor of Education (B.Ed.). This combination of degrees is required in order to be eligible for a teaching permit or "brevet d'enseignement."

Step 1

Students must choose from one of the following twelve profiles: Mathematics, English, English Second Language Teaching, Social Studies, a Science Teaching Major (one of Biology, Chemistry or Physics), French, French/Spanish, Fine Arts, Drama and Music.

The first degree, the BA or BSc, is a 93-credit (123 credits for students from out of province with grade 12) program with a Double Major in Secondary Education and one of the above profiles. This degree may be completed on a part time basis.

Step 2

The second degree, the B.Ed., is a 36-credit program that must be completed on a full time basis and begins in the fall semester only.

Students who have completed an initial undergraduate degree at another institution may apply directly to the B.Ed. but must complete all of the prerequisite courses that are normally taken as part of the first degree before proceeding to the final year. For this reason it normally takes between two to three years to complete the B.Ed. in this way.

Specific Profiles

Students must choose from one of the following twelve profiles for the initial degree of B.A. or B.Sc. Please consult the School of Education for further information and for a list of the specific required courses for each of the profiles. Requirements within each profile are subject to change in accordance with stipulations of the Ministère de l'Éducation, du Loisir et du Sport.

Major in Secondary Education

The courses in Education for the B.A./B.Sc. Double Major are:

EDU 115 Introduction to Professional Practice	...3 credits
with co-requisite ILT101 - Information Literacy Critical Thinking Lab	.....(1 credit)
EDU 200 Orientation to Teaching	.....3 credits
EDU 215 Reflective Practicum	.....6 credits
EDU 275 Managing Behavioural Disorders	.....3 credits
EDU 285 Psychology of Reading	.....3 credits
EDU 301 Educational Psychology	.....3 credits
EDU 302 Philosophy of Education OR	
EDU 303 Sociology of Education	.....3 credits
EDU 305 Multicultural Education	.....3 credits
EDU 309 Effective Teaching Methods	.....3 credits
EDU 322 Integrating Technology in the Classroom	...3 credits
EDU 329 Professional Practicum	.....6 credits
EDU 406 Student Centered Evaluation	.....3 credits

42 credits

Additional courses in Education for Fine Arts, Music and Drama profiles:

EDU 310 K and Elementary Curriculum	.....3 credits
EDU 421 Methods in the Teaching of Language Arts I	.....3 credits
EDU 425 Methods in the Teaching of Creative Arts	.....3 credits

Additional required course in Psychology:

PSY 102 Introduction to Psychology II3 credits
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B.A. Double Major Mathematics and Secondary Education

48 credits Major in Mathematics

Students may complete a B.Sc. Double Major Mathematics and Secondary Education by taking additional courses. Details may be obtained from the Mathematics Department

Required courses

MAT 105 Introduction to Discrete Mathematics	...3 credits
MAT 106 Advanced Calculus 1	.....3 credits
MAT 107 Advanced Calculus 11	.....3 credits
MAT 108 Matrix Algebra	.....3 credits
MAT 109 Linear Algebra	.....3 credits
MAT 110 Excursions in Modern Mathematics	.....3 credits
MAT 210 Ordinary Differential Equations	.....3 credits
MAT 213 Introduction to Probability	.....3 credits
MAT 214 Introduction to Mathematical Statistics	...3 credits
MAT 215 Real Analysis 1	.....3 credits
MAT 221 Introduction to Modern Algebra 1	.....3 credits
Plus 12 credits from any MAT 100 level	.....12 credits
Plus 3 credits from MAT 200 level	.....3 credits

Total of credits for the Major in Mathematics:48 credits

42 credits Major in Secondary Education (see list above)

3 credits Psychology (see list above)

B.A. Double Major English and Secondary Education

48 credits Major in English

ENG 105 -Approaches to Poetry	.....3 credits
ENG 106 - Approaches to Literary Theory	.....3 credits
ENG 112 - English Literary Tradition:	
The Middle Ages and the Renaissance	.....3 credits
ENG 113 - English Literary Tradition II:	
The Eighteenth Century to the Present	.....3 credits
one of ENG 110 - English Writers of Quebec OR	
ENG 111 - Canadian Short Story	.....3 credits
one of: ENG 123, ENG 228, ENG 358, OR	
ENG 375	.....3 credits
one of: ENG 223, ENG 224 OR DRA 222	.....3 credits
one of: ENG 274, ENG 275, ENG 370 OR	
ENG 371	.....3 credits
one of: ENG 200, ENG 201 OR ELA 201	.....3 credits
one of: ENG 210, ENG 211 OR EDU 211	.....3 credits
one of: ENG 233, ENG 234, ENG 235, OR	
ENG 239	.....3 credits

33 credits

Plus 15 credits (5 courses) in English, 12 credits (4 courses)
of which must be at the 200 level or above.15 credits

Total of credits for English Major: 48 credits

42 credits Major in Secondary Education (see list above)

3 credits Psychology (see list above)

B.A. Double Major English Second Language Teaching and Secondary Education

EDU 105 Introduction to Linguistics
for Language Teaching3 credits

EDU 206 Perspectives on

Second Language Acquisition3 credits

EDU 308 Teaching English Grammar3 credits

EDU 207 Teaching the Second Language Learner ...3 credits

EDU 307 Literature and Language Teaching3 credits

ELA 116 Effective Writing3 credits

EDU 208 Drama Techniques for

Language Teaching3 credits

EDU 209 Oral Communication3 credits

ENG 210 Children's Literature3 credits

EDU 211 Youth Literature3 credits

Three of: (9 credits)

ENG 102 Approaches to Media studies3 credits

ENG 200 Creative Writing I: Poetry3 credits

ENG 201 Creative Writing II: Prose3 credits

ENG 236 Popular Culture3 credits

ENG 285 Journalism3 credits

Two of: (6 credits)

ENG 104 Approaches to Short Fiction3 credits

ENG 105 Approaches to Poetry3 credits

ENG 110 English Writers of Quebec3 credits

ENG 111 Canadian Short Story3 credits

ENG 275 The Contemporary Canadian Novel:
"The Myths Are My Reality"3 credits

One of: (3 credits)

EDU 324 Teaching English to Adults3 credits

EDU 325 Selected Topics in Teaching ESL3 credits

FRA 245 Initiation à la traduction I3 credits

PSY 286 Psychology of Language3 credits

Total credits of ESL Teaching Major: 48 credits

42 credits Major in Secondary Education (see list above)

3 credits Psychology (see list above)

B.A. Double Major Social Studies and Secondary Education

24 credits in Environmental Studies and Geography

Required courses

ESG 100 level.....3 credits

ESG 100 level.....3 credits

ESG 200 level.....3 credits

ESG 200 level.....3 credits

ESG 200 level.....3 credits

ESG 200 level.....3 credits

ESG 300 level.....3 credits

ESG 300 level.....3 credits

24 credits

24 credits (8 courses) in History including:

Required courses

Two of:

HIS 104 The Development of the West

HIS 105 The 20th Century World

HIS 108 Intro to Indigenous Studies

HIS 109 New World: The Americas to 1850.....6 credits

Three of:

HIS 207 Canada 1867-1945

HIS 211 Canada Since 1945

HIS 221 Pre-Confederation Canada

HIS 240 Introduction to Public History

HIS 265 Quebec:

Political Change and Industrialization 1840-1930

HIS 266 Contemporary Quebec:

1930 to the present9 credits

One course in European History at the 200 or 300 level

One course in History of the Developing World

at the 200 or 300 level6 credits

One of:

HIS 328 Native/Settler Relations in Canada

HIS 331 Women in 19th and 20th Century Canada

HIS 333 Society and the Environment

HIS 370 The Americas: A Comparative Colonial History

HIS 373 War and Canadian Society

HIS 374 Canada and the World in the

20th Century.....3 credits

24 credits

Total of credits of Social Studies Major: 48 credits

42 credits Major in Secondary Education (see list above)

3 credits Psychology (see list above)

B.Sc. Science Teaching Major - Biology Concentration and Secondary Education

33 credits Biology plus appropriate labs

BIO 110 Introductory Cellular & Molecular Biology

.....3 credits

BIO/BIL 115 Diversity of Life I & Lab

.....3 credits / 1 lab credit

BIO/BIL 116 Diversity of Life II & Lab

.....3 credits / 1 lab credit

BIO/BIL 117 General Ecology & Lab

.....3 credits / 1 lab credit

BIO 131 The Human Body in Health & Disease ..3 credits

BIO/BIL 215 Metabolism & Lab3 credits / 1 lab credit

BIO/BIL 118 Genetics & Lab3 credits / 1 lab credit

BIO 226 Animal Physiology I3 credits

BIO 252 Bioethics3 credits

Plus two of:

BIO 217, BIO 230, BIO 270, BIO 359,
BIO 360, BIO 365, BIO 379, BIO 3806 credits

6 credits Chemistry plus appropriate labs

CHE 104/184 Analytical Chemistry & Lab
.....3 credits / 1 lab credit
CHE 105/185 Organic Chemistry I: Introductory & Lab
.....3 credits / 1 lab credit

3 credits Biochemistry

BCH 191 Survey of Modern Biochemistry - Nutrition from
Science to Life3 credits

6 credits Physics

PHY 101 Statistical Methods in Exp. Science3 credits
PHY 107 Thermal & Fluid Physics3 credits

Total of credits of Biology Major: 48 credits

42 credits Major in Secondary Education (see list above)

3 credits Psychology (see list above)

B.Sc. Science Teaching Major - Chemistry Concentration and Secondary Education

24 credits Chemistry plus appropriate labs

CHE 102 Inorganic Chemistry I3 credits
CHE 103/183 Physical Chemistry I & Lab
.....3 credits / 1 lab credit
CHE 104/184 Analytical Chemistry & Lab
.....3 credits / 1 lab credit
CHE 105/185 Organic Chemistry I: Introductory & Lab
.....3 credits / 1 lab credit
CHE 106/186 Organic Chemistry II: Introductory & Lab
.....3 credits / 1 lab credit
CHE 221/281 Inorganic Chemistry II & Inorganic Lab
.....3 credits 1 lab credit
CHE 223/283 Physical Chemistry II & Lab
.....3 credits / 1 lab credit
CHE 227/287 Principles & Pract. Chemical Spectroscopy &
Mass Spectrometry & Lab3 credits / 1 lab credit

9 credits Biochemistry plus appropriate labs

BCH 191 Survey of Modern Biochemistry -
Nutrition from Science to Life3 credits
Plus 6 credits of BCH or CHE at the 200 level6 credits

9 credits Biology plus appropriate labs

BIO 110 Introductory Cellular & Molecular Biology
.....3 credits
BIO/BIL 117 General Ecology & Lab
.....3 credits 1 lab credit
BIO/BIL 118 Genetics & Lab3 credits 1 lab credit

6 credits Physics

PHY 101 Statistical Methods in Exp. Science3 credits
PHY 107 Thermal & Fluid Physics3 credits

Total credits of Chemistry Major: 48 credits

42 credits Major in Secondary Education (see list above)

3 credits Psychology (see list above)

B.Sc. Science Teaching Major - Physics Concentration and Secondary Education

27 credits Physics plus appropriate labs

PHY 101 Statistical Methods in
Experimental Science3 credits
PHY 106/186 Waves and Optics & Lab
.....3 credits / 1 lab credit
PHY 107 Thermal and Fluid Physics3 credits
PHY 113 or 114 Intro. to Astronomy/Astronomy and
Astrophysics3 credits
PHY 117 Introduction to Mechanics3 credits
PHY 212 Electric Circuits and Electronics3 credits
PHY 213/283 Modern Physics I & Lab
.....3 credits 1 lab credit
PHY 214 Modern Physics II3 credits
PHY 218 Advanced Mechanics3 credits

9 credits Mathematics

MAT 106 Advanced Calculus I3 credits
MAT 108 Matrix Algebra3 credits
MAT 210 Ordinary Differential Equations3 credits

6 credits Biology

BIO 110 Introductory Cellular &
Molecular Biology3 credits
BIO/BIL117 General Ecology & Lab
.....3 credits / 1 lab credit

6 credits Chemistry

CHE 103/183 Physical Chemistry I & Lab
.....3 credits / 1 lab credit
CHE 105/185 Organic Chemistry I: Introductory & Lab
.....3 credits / 1 lab credit

Total credits of Physics Major: 48 credits

42 credits Major in Secondary Education (see list above)

3 credits Psychology (see list above)

B.A. Double Major French and Secondary Education

Students in the French profile will be required to pass a Ministry approved French test prior to the third-year practicum. Success on this test is a requirement for progression through the program. Information about the cost and procedures for this test are available from the School of Education.

48 credits French**Langue française (at least 4 courses)**

FRA 203 Initiation à la langue des affaires3 credits
FRA 204 La communication écrite et verbale3 credits
FRA 205 La phrase complexe3 credits
FRA 207 Mise à jour grammaticale3 credits
FRA 244 Exercices pratiques de français écrit3 credits
FRA 245 Initiation à la traduction I3 credits
FRA 246 Initiation à la traduction II3 credits
FRA 247 Rédaction et communication3 credits
FRA 301 Stylistique et traduction I3 credits
FRA 302 Stylistique et traduction II3 credits

N.B. *A maximum of two grammar courses (French as a first language) taken at another university may also normally be recognized.*

Civilisation et Littérature québécoises (at least 4 courses)

FRA 163 Explication de textes I	3 credits
FRA 164 Explication de textes II	3 credits
FRA 261 Le Théâtre du XVIIe au XIXe siècle	3 credits
FRA 262 Moralistes et penseurs	3 credits
FRA 263 De la féminité au féminisme :	
les femmes de lettres	3 credits
FRA 264 Les époques de la critique	3 credits
FRA 265 Aspects du romantisme	3 credits
FRA 266 La littérature interrogée, XXe siècle	3 credits
FRA 361 100 ans de poésie	3 credits
FRA 362 Le nouveau roman	3 credits
FRA 363 Écriture et Pouvoir politique	3 credits
FRA 364 Les philosophes romanciers	3 credits
FRA 365 La grande époque du roman	3 credits

Civilisation et Littérature québécoises (at least 4 courses)

FRA 270 Littératures migrantes et de la francophonie	3 credits
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Plus three other courses from:

FRA 181 Histoire socio-culturelle du Québec I	3 credits
FRA 182 Histoire socio-culturelle du Québec II	3 credits
FRA 186 L'attrait des sciences et de la ville	3 credits
FRA 187 Introduction au théâtre québécois	3 credits
FRA 284 Littérature et condition des femmes au Québec	3 credits
FRA 285 Roman québécois contemporain	3 credits
FRA 287 De l'aventure et de l'histoire	3 credits
FRA 288 Le Québec culturel de la Révolution tranquille	3 credits
FRA 290 Censure, religion, campagne et coureurs de bois	3 credits
FRA 381 Littérature orale au Québec	3 credits
FRA 382 Littérature acadienne	3 credits
FRA 384 Poésie et chanson du Québec	3 credits
Plus 4 more courses in French	12 credits

Total credits of French Major: 48 credits

42 credits Major in Secondary Education (*see list above*)

3 credits Psychology (*see list above*)

B.A. Double Major French/Spanish and Secondary Education

Students in the French/Spanish profile will be required to pass a Ministry approved French test prior to the third-year practicum. Success on this test is a requirement for progression through the program. Information about the cost and procedures for this test are available from the School of Education.

24 credits in French

Langue française (at least 4 courses)

FRA 203 Initiation à la langue des affaires	3 credits
FRA 204 La communication écrite et	

verbale en milieu de travail	3 credits
FRA 205 La phrase complexe	3 credits
FRA 207 Mise à jour grammaticale	3 credits
FRA 244 Exercices pratiques de FRA écrit	3 credits
FRA 245 Initiation à la traduction I	3 credits
FRA 246 Initiation à la traduction II	3 credits
FRA 247 Rédaction et communication	3 credits
FRA 301 Stylistique et traduction I	3 credits
FRA 302 Stylistique et traduction II	3 credits

Civilisation et Littérature françaises (at least 4 courses)

FRA 163 Explication de textes I	3 credits
FRA 164 Explication de textes II	3 credits
FRA 261 Le Théâtre du XVIIe au XIXe siècle	3 credits
FRA 262 Moralistes et penseurs	3 credits
FRA 263 De la féminité au féminisme :	
les femmes de lettres	3 credits
FRA 264 Les époques de la critique	3 credits
FRA 265 Aspects du romantisme	3 credits
FRA 266 La littérature interrogée, XXe siècle	3 credits
FRA 361 100 ans de poésie	3 credits
FRA 362 Le nouveau roman	3 credits
FRA 363 Écriture et Pouvoir politique	3 credits
FRA 364 Les philosophes romanciers	3 credits
FRA 365 La grande époque du roman	3 credits

Civilisation et Littérature québécoises (at least 4 courses)

FRA 270 Littératures migrantes et de la francophonie	3 credits
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Plus three other courses from:

FRA 181 Histoire socio-culturelle du Québec I	3 credits
FRA 182 Histoire socio-culturelle du Québec II	3 credits
FRA 186 L'attrait des sciences et de la ville	3 credits
FRA 187 Introduction au théâtre québécois	3 credits
FRA 284 Littérature et condition des femmes au Québec	3 credits
FRA 285 Roman québécois contemporain	3 credits
FRA 287 De l'aventure et de l'histoire	3 credits
FRA 288 Le Québec culturel de la Révolution tranquille	3 credits
FRA 290 Censure, religion, campagne et coureurs de bois	3 credits
FRA 381 Littérature orale au Québec	3 credits
FRA 382 Littérature acadienne	3 credits
FRA 384 Poésie et chanson du Québec	3 credits

24 credits in Hispanic Studies

SPA 203 Spanish Practice I	3 credits
SPA 204 Spanish Practice II	3 credits
SPA 323 Spanish Linguistics I	3 credits
SPA 324 Spanish Linguistics II	3 credits
SPA 325 Advanced Spanish Grammar	3 credits
SPA 331 Intro. to Peninsular Literature	3 credits
SPA 332 Intro. to Spanish American Literature	3 credits
Plus any 300 level SPA course	3 credits

42 credits Major in Secondary Education (*see list above*)

3 credits Psychology (*see list above*)

Students in the following profiles will take 9 additional credits in Elementary Education

B.A. Double Major Fine Arts and Education

39 credits Fine Arts (18 credits Art History, 18 credits Studio Art, 3 credits Art Ed.)

Required courses:

FIH 101 Survey of Western Art I3 credits
 FIH 102 Survey of Western Art II3 credits
 Plus a further 4 courses in Art History,12 credits
 including 2 of FIH 310, FIH 311, FIH 312

6 courses in Studio Art18 credits

FIN 301 Art Education: Theory and Practice3 credits

42 credits Major in Secondary Education (*see list above*)

9 credits in Elementary Education (EDU 310, EDU 421 and EDU 425)

3 credits Psychology (*see list above*)

B.A. Double Major Drama and Secondary Education

39 credits Drama

Required courses:

DRA 101 Introduction to Technical Theatre3 credits
 DRA 102 Introduction to Theatre before 18003 credits
 DRA 110 Introduction to Theatre after 18003 credits
 DRA 131 Acting I3 credits
 DRA 201 Contemporary Canadian Drama3 credits
 DRA 222 Introduction to Shakespeare3 credits

Four of: 12 credits

DRA 160 Design for Theatre I
 DRA 132 Acting II
 DRA 233 Acting III
 DRA 234 Acting IV
 DRA 246 Intro. to Directing
 DRA 251 Lighting Design
 DRA 331 Production I*
 DRA 332 Production II*

**Only students who have done Acting I-IV may do the production courses.*

Three of: 9 credits

DRA 300 Contemporary Theatre Practice
 DRA 301 Contemporary Dramatic Theory
 DRA 302 Classical European Drama
 DRA 315 Medieval Drama
 DRA 322 Topics in Shakespeare

42 credits Major in Secondary Education (*see list above*)

9 credits in Elementary Education (EDU 310, EDU 421 and EDU 425)

3 credits Psychology (*see list above*)

B.A. Double Major Music and Secondary Education

39 credits Music

I. Compulsory courses:

Music Theory.....15 credits
 MUS 139, MUS 131, MUS 132, MUS 231,
 MUS 121, 122, 221
 Musical Literature3 credits

Any course in this category

Music History6 credits

Any two courses in this category

Performance.....12 credits
 MUS 172/173, MUS 272/273 Individual Practical Study

Two complete years of ensemble

II. Music Electives 3 credits

Independent study in instrumental techniques or conducting

42 credits Major in Secondary Education (*see list above*)

9 credits in Elementary Education (EDU 310, EDU 421 and EDU 425)

3 credits Psychology (*see list above*)

Bachelor of Education (Secondary Education Program)

The required courses are:

EDU 401 Quebec Education3 credits
 EDU 402 Contemporary Issues in Education3 credits
 EDU 407 Individual Differences3 credits
 EDU 420 Interdisciplinary Teaching and Learning at the
 Secondary Level6 credits
 EDU 429 Internship Practicum15 credits

1 course from the following:

EDU 411 Methods in Teaching Language Arts6 credits
 EDU 412 Methods in Teaching Mathematics6 credits
 EDU 413 Methods in Teaching Sciences and
 Technology6 credits
 EDU 414 Methods in Teaching Social Studies6 credits
 EDU 415 Methods in Teaching Creative Arts6 credits
 EDU 418 Methods in Teaching Second Languages ...6 credits

For a total of

36 credits

ELEMENTARY TEACHER EDUCATION PROGRAM

The Elementary Teacher Education Program at Bishop's University is a two step program leading to two degrees, a Bachelor of Arts in Educational Studies and a Bachelor of Education. This combination of degrees is required in order to be eligible for a teaching permit or "brevet d'enseignement." The first degree prepares the student to teach a broad range of subjects that can be found in the elementary curriculum. Students who have completed another bachelor degree will be required to follow this program as part of their B.Ed. Please note that requirements of this program are subject to change in accordance with stipulations of the Ministère de l'Éducation, du Loisir et du Sport.

Step One:

The compulsory courses in Education are:

- EDU 116 Introduction to Professional Practice
with co-requisite ILT 101 - Information Literacy Critical Thinking Lab (1 credit)
- EDU 201 Orientation to Teaching
- EDU 202 Teaching Ethics and Religious Culture
- EDU 211 Introduction to Young Adult Literature and Other Contemporary Texts
- EDU 216 Reflective Practicum
- EDU 275 Managing Behaviour Disorders in The Classroom
OR PSY 290
- EDU 285 Psychology of Reading
- EDU 305 Multicultural Education
- EDU 322 Integrating Technology in the Classroom
- EDU 301 Educational Psychology
- EDU 302 Philosophy of Education **OR**
EDU303/SOC299 Sociology of Education
- EDU 309 Effective Teaching Methods
- EDU 310 K and Elementary Curriculum
- EDU 328 Professional Practice - Elementary
- EDU 406 Student Centered Evaluation
- EDU 421 Methods in Teaching Language Arts I
- EDU 422 Methods in the Teaching of Mathematics I
- EDU 425 Methods in the Teaching of
Creative Arts - Elementary

The compulsory courses in other disciplines are:

- HIS 104 **OR** HIS 105 **OR** HIS 109
- ESG 126 **OR** ESG 127 **OR** ESG 162 **OR** ESG 100
- MAT 100 Excursions in Modern Math
- ENG 210 Children's Literature
- *PSY 237 Child Development II

**The Psychology Department might request that students take some prerequisite Psychology courses prior to taking the above course.*

Two of:

- PHY 113 Introduction to Astronomy **OR**
PHY 111 Physics of Everyday Phenomena
- BIO/BIL 193 Introductory Biology + lab
- CHE 131 The Chemistry of Everyday Life

One of:

DRA 102, DRA 110, FIN 140, FIN 181, FRA 203, FRA 204, FRA 244, FRA 245 or any course in French or Quebec Civilization or Literature, MUS 110, MUS 111, MUS 130, REL 100, REL 101

Step Two

The compulsory courses for the Bachelor of Education are:

- EDU 401 Quebec Education3 credits
- EDU 402 Contemporary Issues in Education3 credits
- EDU 407 Individual Differences3 credits
- EDU 423 Methods in the Teaching of
Natural Sciences3 credits
- EDU 424 Methods in the Teaching of
Social Sciences.....3 credits
- EDU 428 Internship – Elementary15 credits
- EDU 431 Methods in the Teaching of
Language Arts II.....3 credits
- EDU 432 Methods in the Teaching of
Mathematics II3 credits

COURSE DESCRIPTIONS

EDU 105 Introduction to Linguistics for Language Teaching 3-3-0

This course provides the theoretical background in linguistics for teachers of second languages. Topics covered include the major themes in linguistics (phonetics, phonology, morphology, syntax and semantics) that inform the teaching and learning of languages.

EDU 115/116 ab Introduction to Professional Practice 3-3-0

Students will focus on the human and professional elements of teaching in order to identify those personal traits that are characteristic of effective teachers. This course introduces students to the process of reflective practice and to the professional knowledge base that inspires it. The above course components combined with field-based experiences and classroom presentations will help students make informed judgments as to their suitability for the teaching profession.

Co-requisite: ILT 101 - Information Literacy Critical Thinking Lab

ILT 101 Information Literacy and Critical Thinking Lab 1-0-1

The objective of this laboratory course is to introduce students to the skills necessary to effectively complete their research assignments including the correct use of library resources including the online catalogue, periodical indexes and other relevant databases. Other areas of study include the identification of key terms for effective searching, productive use of the internet and the critical evaluation of retrieved resources. Academic integrity, plagiarism and the correct citation of print and online sources are also taught. The course is practical, and students are given the opportunity for hands-on experience in the library's electronic classroom. Taught in conjunction with EDU115/116ab, "Introduction to Professional Practice", students retrieve the resources necessary to complete their assignments for the course.

EDU 200/201a Orientation to Teaching 3-3-0

These courses are designed to introduce pre-service teachers to the act and art of teaching at the secondary/elementary level. Students will explore areas such as the latest research on the learning process, teaching for learning, learning communities, evaluating for learning, and the Quebec Education Program.

Students will continue the identification process with the teaching profession begun in the EDU 115/116 course. EDU 200/201 is taken concurrently with EDU 215/216, the Reflective Practicum; the two courses collectively allow the students to explore both the theory and practice of the teaching profession.

Prerequisite: EDU 115/116

Co-requisite: EDU 215/216

EDU 202 Teaching Ethics and Religious Culture 3-3-0

The purpose of this course is to introduce pre-service teachers to the Ethics and Religious Culture program, implemented in all Quebec elementary schools as of 2008. Topics covered will include familiarization with Quebec religious heritage and current social and religious trends; consideration of local and global social visions, values and prescriptions; awareness of different cosmologies and understandings of humanity; encouraging the ability to take a reflective position on moral or ethical issues; developing understandings and appreciation of religious diversity and secular perspectives; and fostering the ability to position oneself with respect to issues of self and other in

questions on meaning of life, death, suffering, social justice and more. Particular attention will be given to making the theoretical dialogue within this course applicable to the teaching context.

EDU 206 Perspectives on Second Language Acquisition 3-3-0

Through this course, students will examine the implications of theories of language acquisition for the teaching and learning of second languages at the elementary, secondary and adult levels. The relevance of past and current research in both first and second language acquisition will be a major topic of discussion.

EDU 207 Teaching the Second Language Learner 3-3-0

With a focus on individual learners and their needs, this course will introduce students to a learner-centered approach to the teaching of ESL. Considerations of learner background such as culture, learning styles, and special needs will be addressed, as well as issues related to bilingualism and minority language groups. The course discussions will include attention to learners at all levels: elementary, secondary and adult.

EDU 208 Drama Techniques for Language Teaching 3-3-0

This course is an introduction to the creative process of drama.(using role playing, improvisation and theatre games to explore language learning)Focus is on developing one's own creative potential using improvisation, theatre games, movement, voice and play making. Through individual and group work participants will learn strategies for using drama in the classroom.

EDU 209 Oral Communication 3-3-0

This course will address issues related to the development of listening and speaking skills in second language learners, including those related to pronunciation. In addition, it will focus on varieties of oral communication in different contexts and for different levels and ages of learners.

EDU 211ab Introduction to Young Adult Literature and Other Contemporary Texts 3-3-0

This course is intended for future elementary teachers who wish to better investigate how to evaluate, select and share young adult literature. In the course, students will examine different genres of literature such as poetry, short stories, plays and novels. Furthermore, students will reconsider the traditional meaning of "text" and examine contemporary texts such as film, television, music lyrics and videos and how and if they play a role in classrooms.

EDU 215/216f Reflective Practicum 6-6-0

This second-year practicum experience involves the integration of theories about teaching and learning with observation and practice in a school classroom. Students are placed in an elementary or secondary classroom for half a day each week throughout the year. In addition, they participate in regular seminars to review and refine their approach to teaching throughout and written reflection.

Co-requisite: For EDU215 the co-req is EDU 200 Orientation to Teaching, Secondary For EDU216 the co-req is EDU201 Orientation to Teaching, Elementary

EDU 275a Managing Classrooms and Student Behaviours 3-3-0

This course will deal with the general principles of classroom and behaviour management. Its four goals are the following: to provide future teachers with the knowledge to manage their classrooms effectively; to present different models and theories of classroom management; to identify and discuss specific behaviour problems; to examine how schools attempt to work effectively with difficult students and their parents.

EDU 285 Psychology of Reading 3-3-0

The lifelong acquisition of reading skills is complex. Teachers need to understand the integrated language system: oral language (listening and speaking), reading and writing. Designed for teachers, the aim of this course is to learn about the psychological processes involved when we read. Theoretical approaches to language acquisition will be examined. Teaching strategies using multi-modal approaches supporting the development of reading skills will be introduced for various age and educational levels. Issues such as bilingualism, English language learning and cultural differences will be addressed. Reading disabilities affect many learners and impact all subject areas; consequently, knowing how language is acquired will enable teachers to understand the nature of reading disabilities and to learn strategies to meet the needs of all students in an integrated classroom setting.

EDU 301a Educational Psychology 3-3-0

This course introduces pre-service teachers specializing in elementary and secondary education to the area of Educational Psychology. Educational Psychology prepares the teacher to understand principles of learning/cognition, human development, and motivation and the application of these theories to classroom learning, problem-solving, critical thinking and teaching, design of curricula, learners' with special needs, classroom management, and assessment and evaluation.

Prerequisites: EDU 200 or EDU 201 and EDU 215 or 216 are prerequisites or corequisites with permission.

EDU 302b Philosophy of Education 3-3-0

The course will focus upon philosophical ideas as they are applied to educational problems. Students will undertake a critical inquiry into several philosophical schools of thought with the view of developing a personal philosophy of education. Each school of thought will be examined in the light of its essential elements and basic principles as well as how each has influenced educational theory and practice. Questions of ethics are central to the course.

EDU 303/SOC 299a Sociology of Education 3-3-0

The purpose of this course is to examine education in Canada from a critical sociological perspective. Education is a major institution in most societies and is a vital part of our social existence. The sociology of education, a subfield of sociology, focuses on the institution of education and the structures, processes and interaction patterns within it. We will look at the educational system as a whole, integrated and dynamic entity. To do so, reference will be made to a variety of sociological studies, but the main perspective is critical.

EDU 305ab Multicultural Education 3-3-0

This course is designed to engage teachers candidates in a critical examination of key concepts and issues in the field of education that help us approach questions of identity, difference, pluralism and social justice from an historical, philosophical and sociological perspective. Drawing from a range of theoretical and practical as well as multimedia resources, we will try to develop a critical awareness as reflective practitioners in relation to the social forces that influence the teaching-learning process in diverse societies.

EDU 307 Literature and Language Teaching 3-3-0

This course will explore the use of literature as a basis for the teaching of ESL. Theories regarding the connection between literature and language learning will be introduced, and students will be involved in the construction of classroom learning situations based on poetry, short stories and novels.

EDU 308 Teaching English Grammar 3-3-0

This course is intended to achieve two aims: to provide students with an overview of grammatical issues for learners of English as a second language, and to address the strategies and methods that ESL teachers might adopt to integrate the teaching of grammar into their classrooms. Practice in the effective design of instruction and materials for the teaching of grammar will be significant component of the course.

EDU 309b Effective Teaching Methods 3-3-0

This course will focus on the curriculum process and will examine how teachers and learners participate in the various dimensions of that process. Students will use their prior knowledge and understanding of effective learning in order to generate curricular frameworks to guide their classroom practice. They will design strategies to make student learning more meaningful. The primary goals of this course are to (1) understand the roles of the schools, curricula, teachers and learners in the 21st century, (2) understand several different modes of teaching and how each influences the learners' way of coming to know and (3) understand how to construct and effectively use unit level and lesson level plans.

Prerequisites: EDU 116 and EDU 200 and EDU 215 OR EDU 201 and EDU 216. Third-year standing or permission of the school.

EDU 310ab K and Elementary Curriculum 3-3-0

Students participating in this introductory course, taught in an authentic, primary classroom environment, will explore the principles and practices which are germane to organizing and operating the classroom for learners in kindergarten and elementary school. They will examine typical early childhood programs emphasizing active learning, the role of play, the physical environment, materials and organizational components including criteria for creating and evaluating the quality of the environment for children in kindergarten through elementary school. Attention will be paid to the teaching of all subjects including moral and religious education.

EDU 322b Integrating Technology in the Classroom 3-3-0

A basic course in the design, development, selection, utilization, management, and evaluation of processes and resources for enhancing the teaching and learning process. These include a range of technologies from traditional media (i.e., print materials, overhead transparencies, displays, video) to advanced technologies (i.e., CD-ROM, digitized audio/video, telecommunications). Skills in the design, development and delivery of effective communications through print, projected, and display media will be emphasized. Principles of page layout, typography, graphic placement, and organization will be applied to the development and selection of materials for interdisciplinary, multimedia thematic units. Through lectures, hands-on practice, small group discussions, and skills-building activities, students will integrate these technologies into active learning environments for K-12 students.

EDU 324 Teaching English to Adults 3-3-0

This course will explore the particular needs and challenges of adult learners of English as a Second Language. Students will be connected to local classrooms of adult learners to observe their language learning experience and to consider ways to construct appropriate learning situations for them.

EDU 325 Selected Topics in Teaching ESL 3-3-0

This course is designed to provide opportunities for students to explore recent and/or controversial topics related to second language teaching and learning. Specific topics will vary from year to year so that current issues may be addressed.

EDU 330b Independent Study in Education 3-3-0

Students in the first degree (BA Educational Studies/Elementary Education or BA/BSc Double Major/Secondary Education) may be granted permission to pursue an independent study project under the guidance of a faculty supervisor on a topic in Education. Topics must be approved by the School of Education.

EDU 401b Quebec Education 3-3-0

Students will have an opportunity to study development of the Quebec educational system from its early 17th century confessional beginnings to the establishment of the new linguistic structures. Students will explore major educational ideas such as access to education and the growth of professionalism in the system. Legislation and regulations such as the Régime Pédagogique will be examined in the course.

EDU 402b Contemporary Issues in Education 3-3-0

Students will study the school in a societal context. They will examine the nature of change in educational institutions with a view of understanding their role as agents of change and the impact of change upon others.

EDU 406a Student Centered Evaluation 3-3-0

This course introduces pre-service teachers to the multi-dimensional and complex nature of the evaluation process fundamental to the development and tracking of competency. In this course we will explore and construct a conceptual understanding of evaluation strategies that support student learning and how these strategies can be built into daily practice. We will also construct an understanding of those classroom practices that are required to focus students on expected learning outcomes and determine to what extent these expectations have been met.

EDU 407b Individual Differences 3-3-0

This course focuses on the teaching of students with special needs in inclusionary settings in the school community. Class discussions will centre on the issues surrounding mainstreaming and inclusion and their implications for teaching adaptations in the classroom and school community. Students will gain an understanding of the methods and strategies needed to successfully integrate special populations (including, but not limited to learning disabled, physically challenged, sensory impaired and behaviour disordered).

EDU 411a Methods in the Teaching of the Language Arts – Secondary 6-6-0

This course will help to prepare students to teach English Language Arts at the Secondary and Adult Education levels. Students will have the opportunity to work on their own writing skills while learning more about how to encourage secondary and adult learners to improve their abilities to read and communicate orally and in writing. They will become familiar with the QEP curriculum objectives for the English program and will be involved in planning units in assorted texts within the current Secondary English curriculum. Students will be exposed to new trends and appropriate assessment tools through classroom activities and assignments.

EDU 412a Methods in the Teaching of Mathematics - Secondary 6-6-0

This course will focus on strategies for the teaching of Mathematics in the secondary school curriculum. Students will gain an understanding of the general curriculum objectives, trends and teaching methods through lectures, practice in the problem-solving approach, and discussions of appropriate means for assessment. Students may do projects and assignments related to course topics at the secondary or adult education levels.

EDU 413a Methods in the Teaching of Science C Secondary 6-6-0

This course will focus on an applied approach to the teaching of science, in keeping with a "learn by doing" constructivist approach. Learning will take place through hands-on problem solving and design activities. Students will work on applied projects related to inquiry questions designed to develop a deeper understanding of issues currently under investigation by the scientific community. Discussions of teaching strategies in science will stem from the students' work on these projects. Understanding of the scientific method and the role of technology in approaching scientific problems will be features of the course.

EDU 414a Methods in the Teaching of Social Sciences – Secondary 6-6-0

This course focuses on the teaching strategies and learning concepts in the geography, history and citizenship curricula. Students will gain an understanding of the general curriculum competencies, objectives and trends as well as of the conceptual base and associated methodologies of the disciplines. Students will be required to design a curriculum resource unit including appropriate tasks and assessment tools. They will also learn how to select as well as create resource materials.

EDU 415a Methods in Teaching The Creative Arts – Secondary 6-6-0

The class itself models several teaching and learning situations and strategies for both elementary and secondary levels of instruction. Students work in groups, with partners and alone. Peer tutoring is used for part of the creative movement/dance unit. Students are given the opportunity each semester to talk with an artist currently exhibiting at the art gallery. Students are expected to develop sequential arts-based lessons formally, thematically and experientially, drawing on in-class situations modeled for them. Students are made aware of Howard Gardner's Multiple Intelligences Model and the importance of matching teaching and learning styles.

EDU 418a Methods in Teaching Second Languages – Secondary 6-6-0

This course will provide a background in the principles and methods of teaching second and third languages to elementary and secondary level students. Course topics will include the theoretical basis for first and second language acquisition and learning; additionally, it will provide practical techniques for teaching and assessing oral and written components of language classrooms and for addressing a diversity of student backgrounds and needs.

EDU 420 Interdisciplinary Teaching and Learning at the Secondary level 6-6-0

This course assists students to plan for interdisciplinary teaching and learning at the secondary level. Students will explore the role of language across the curriculum and the different conceptual and textual demands of each discipline. Students will learn strategies for facilitating significant in-depth learning for adolescents through the use of interdisciplinary approaches such as project-based learning. They will be required to design a learning and evaluation situation incorporating two or more of the secondary disciplines.

EDU 421b Methods in the Teaching of Language Arts I - Elementary 3-3-0

The course will focus on language learning in English mother tongue with some class time spent on teaching English as a second language. We will be examining current research on the development of language arts: listening, speaking, reading, writing and viewing in the classroom setting and what we as teachers do to facilitate learning; and considering this research in the light of our own classroom experiences. This course will focus primarily on the development of oral language and reading skills although all four language arts will be considered as they are inter-connected. Before exiting the course, students will be able to develop a unit plan with individual lessons, present peer workshops and offer written and oral presentations.

EDU 422 Methods in the Teaching of Mathematics I 3-3-0

This course will focus on K-3 mathematics. Through the discovery of patterns and relationships and problem-solving, the students will be focusing on themes appropriate for the targeted age-group. Relevant resource materials will be examined with special emphasis on instructional practices. The course intends to impart to student knowledge of mathematics content in the elementary school (mathematically literate); problem solving in mathematics, creating problems and authentic tasks exercises, conceptual understanding from a constructivist approach, assessment in mathematics through the use of rubrics and concept maps.

EDU 423a Methods in the Teaching of Natural Sciences – Elementary 3-3-0

This course will focus on inquiry strategies for teaching the sciences in the elementary school curriculum. Students will create and demonstrate peer science workshops based on elementary science curriculum. Students will gain an understanding of the science competencies in the education curriculum through lectures, presentations and real world science problem-solving. The course will result in students developing an inquiry learning project with multiple lessons and piloting the lessons in a simulated teaching situation.

EDU 424a Methods in the Teaching of Social Sciences – Elementary 3-3-0

This course will provide students with opportunities to become active and reflective practitioners in the teaching and learning of social science. Teachers are expected to bring to their practice a knowledge of not only what students need to learn but also a knowledge of how they learn. In this course, teacher candidates will gain an understanding of the general social science curriculum competencies, objectives, and trends as well as of the conceptual base and associated methodologies of the discipline.

EDU 425a Methods in the Teaching of Creative Arts – Elementary 3-3-0

This course provides starting points for students to examine Visual Arts and Music both as separate disciplines and as potent tools in an integrated curriculum. Through a variety of approaches, students receive instruction in theory and teaching practices as well as hands-on experience. During the term students develop their own instructional strategies through the development of a curriculum unit of thematically related, arts based lesson plans and projects.

EDU 431a Methods in the Teaching of Language Arts II 3-3-0

The course will focus on teaching Language Arts in Cycles 2 and 3. Students will be presented with a variety of ways to help intermediate students continue to develop their reading and writing skills. They will be introduced to methods for the teaching of English as a Second Language in English language schools. They will review the requirements of the reformed curriculum and become aware of new trends and appropriate assessment tools through classroom activities. Before exiting the course, students will be able to develop a unit plan with individual lessons, present peer workshops and make written and oral presentations.

EDU 432a Methods in the Teaching of Mathematics II 3-3-0

This course is the second part of the teaching mathematics course in elementary school. In this course students will learn how to teach problem-solving techniques through various activities. The course entails group and class discussions, professional reading, lesson write-ups, lesson presentations, and peer evaluations. The modes of instruction used in this course include brief lectures, question and answer, problem solving, simulations, practices that reflect on the elements of effective mathematics education.

The following Practice Teaching components take place in assigned educational settings:

EDU 328b Professional Practice – Elementary 6-3-0

Through field experience in the elementary or secondary school setting, students will integrate theory with practice in this practice teaching placement. Students will plan, present, and self-evaluate lessons in collaboration with faculty supervisors, university teaching associates, and associate teachers. They will evaluate students and participate in the life of the school inside and outside the classroom. Students in certain secondary profiles may be placed in an adult education setting.

EDU 329b Professional Practice - Secondary 6-3-0

Through field experience in the elementary or secondary school setting, students will integrate theory with practice in this practice teaching placement. Students will plan, present, and self-evaluate lessons in collaboration with faculty supervisors, university teaching associates, and associate teachers. They will evaluate students and participate in the life of the school inside and outside the classroom. Students in certain secondary profiles may be placed in an adult education setting.

EDU 428/429b Internship 15-0-0

This practicum is the culmination of the students' socialization into the profession of teaching. Through a lengthy school immersion, students synthesize theories with practice to assume the competencies required of a teacher in the classroom and in the profession. Students become full-time teachers and colleagues with associate teachers, university teaching associates and faculty supervisors. They focus on long term and short term planning and implementing units of study. They experience all the challenges of the profession C teaching and evaluating students, interviewing parents, working on teams, organizing extra-curricular activities, and participating in professional development activities. Students in certain secondary profiles may be placed in an adult education setting.

Programs leading to the Master of Arts (M.A.) in Education, the Master of Education (M.Ed.), the Certificate in Teaching English as a Second Language and the Principal's Professional Certificate.

Courses leading to the degrees of M.A., M.Ed. the Certificate in Teaching English as a Second Language and the Principal's Professional Certificate are offered during each of the four semesters: Fall, Winter, Spring, and Summer. During the fall and winter, courses are offered primarily during the evening and on week-ends. Evening or week-end courses are offered on or off campus during the spring semester. A summer school is held on campus.

Course Offerings

In the M.A. or M.Ed. program, students pursue studies in one of three concentrations, Art Education, Educational Leadership, or Curriculum Studies. There are compulsory courses common to all students, in addition to some specific ones, depending on which program the student has opted for. Students who have completed graduate courses at Bishop's University may be considered for advanced standing. The Admissions Committee of the School of Education may consider the transfer of a maximum of nine credits from the Principal's Professional Certificate Program, or the Certificate in Teaching English as a Second Language (TESL). Such transfer credits will only be considered for courses in which the grade received is at least 75%. Practicum courses are not eligible for such transfers.

Master of Arts in Education

45-credit program with thesis

Concentration in Educational Leadership

Educational Research Module

6 compulsory credits including

GSE 512: Research Methods I

One of:

GSE 513: Research Methods II (Qualitative)

GSE 515: Research Methods III (Quantitative)

GSE 511: Educational Statistics

Foundations in Educational Leadership Module

9 Credits

GSE 571: Principles of Educational Leadership

One of:

GEA 521: Seminar in Educational Administration

GSE 572: Seminar in Leadership in Curriculum & Instruction

One of:

GEA 522: The Principal

GSE 573: Creating Effective Schools

Electives

6 Credits

Exit documents

24 Credits

GSE 705: Thesis Proposal (3 credits)

GSE 700: Thesis (21 credits)

Master of Arts in Education

45-credit program with thesis

Concentration in Curriculum Studies

Educational Research Module

6 compulsory credits including

GSE 512: Research Methods I

One of:

GSE 513: Research Methods II (Qualitative)

GSE 515: Research Methods III (Quantitative)

GSE 511: Educational Statistics

Additional Requirements

GSE 503: Curriculum Explorations I

One 9-credit Specialization Module (see page 63)

Electives

3 Credits

Exit Documents

24 Credits

GSE 705: Thesis Proposal (3 credits)

GSE 700: Thesis (21 credits)

Master of Education

Concentration in Art Education

45-credit program without thesis

Research Module

9 compulsory credits

GSE 510: Academic Reading and Writing

GSE 512: Research Methods I

GSE 516: Introduction to Action Research

Foundations in Art Education

12 credits

GSE 590: The Creative Process in Education

GSE 594: Readings in Art Education

GSE 501: Psychology of Teaching and Learning

GSE 502: Educational Philosophies

Specialization

9 credits of Art Education courses

Electives

6 credits

Exit Document

9 credits

GSE 701: Monograph

OR

GSE 703: Project in Art Education

OR

GSE 704: Art Exhibition and Supporting Documents

Concentrations in Educational Leadership and Curriculum Studies

45-credit program without thesis

Research Module

9 compulsory credits

GSE 510: Academic Reading and Writing

GSE 512: Research Methods I

GSE 516: Introduction to Action Research

Educational Leadership

Foundations

12 credits

GSE 571: Principles of Educational Leadership

GSE 573: Creating and Leading Effective Schools

GSE 503: Curriculum Explorations I

GSE 502: Educational Philosophies

Specialization

9 credits of Educational Leadership courses

Electives

6 credits

Curriculum Studies

Foundations

12 credits

GSE 501: Psychology of Teaching and Learning

GSE 505: Evaluation and Assessment

GSE 503: Curriculum Explorations I

GSE 502: Educational Philosophies

Specialization

9 credits of Curriculum Studies courses

Electives

6 credits

Exit Document

9 credits

GSE 701: Monograph

OR

GSE 703: Project in Educational Leadership/Project in Curriculum Studies

More detailed information about specific course choices for specialization is available from the School of Education.

Certificate in Teaching English as a Second Language

This program offered by the School of Education at Bishop's is for teachers of English as a Second Language. Successful students receive the Bishop's University Certificate in Teaching English as a Second Language. Courses are offered during the Fall, Winter, and Spring semesters, as well as during the Graduate Summer School.

General requirements for admission

Candidates who hold an appropriate undergraduate degree and a teaching permit will be considered for admission. Candidates with qualifications deemed to be equivalent by the School of Education may be admitted.

Procedures for admission

Applicants will submit the application form for admission to the certificate program accompanied by a letter explaining their interest in second language teaching and requesting admission to the program.

Specific requirements for completion of the certificate

Candidates who are accepted into the program must complete 10 courses (30 credits) as outlined below.

Compulsory Courses:

GSE 581	Introduction to Linguistics for Language Teaching	3 cr.
GSE 582	Language Acquisition	3 cr.
GSE 581 and GSE 582 are considered prerequisites for the following courses unless permission of the School of Education is granted.		
GSE 584	Teaching English Grammar	3 cr.
GSE 585	Methods I	3 cr.
GSE 586	Methods II	3 cr.
GSE 587	Testing and Evaluation	3 cr.
GSE 589	Observation and Practice Teaching in Second Language Classrooms	6 cr.

Optional courses:

Two of the following

GSE 583	Course Design	3 cr.
GSL 589	Individual Project in Teaching English	3 cr.
GSE 588	The Second Language Learner	3 cr.
GSL 582	Teaching English to Adults	3 cr.

COURSE DESCRIPTIONS

GSE 500 Special Topics in Curriculum 3-3-0
This course has been designed to provide the student with the opportunity to examine recent developments in curriculum.

GSE 501 Psychology of Teaching and Learning 3-3-0
This course will examine ways to use the theories, principles and research methods of psychology to understand learning and to inform the teaching and curriculum processes. The implications of different theories of learning will be examined. Students will compare and contrast how the theories define knowledge and learning. Students are encouraged to explore in depth topics relevant to their practice.

GSE 502 Educational Philosophies 3-3-0
This course will examine the philosophical principles and theories that provide a foundation for education today. Through a critical review of philosophical perspectives, students will develop an understanding of the way in which these perspectives continue to shape current educational thinking and practice.

GSE 503 Curriculum Explorations I 3-3-0
This introductory course will examine curriculum as a socially constructed process. Students in the course will examine the principles and theories relating the various dimensions of the curriculum process: designing, planning, enacting and reflecting.

GSE 504 Curriculum Explorations II 3-3-0
This course is an extension of GSE 503, Curriculum Explorations I. Students will focus on using the knowledge acquired in GSE 503 and new knowledge constructed in GSE 504 to generate a curriculum design and the resources necessary to enact that design.
Prerequisite: GSE 503

GSE 505 Evaluation and Assessment 3-3-0
This course will focus on the role of evaluation and assessment of the learning process and will include an examination of their underlying principles. The practical implications of the school context on the learning process will be explored.

GSE 510 Academic Reading and Writing 3-3-0
This course has been designed to facilitate students' ability to (1) read, synthesize and analyze academic articles, books and other primary source texts and (2) express their knowledge and ideas in a scholarly fashion using the conventions defined by academic journals. Different types of research articles will be examined and strategies for reading each type explored.

GSE 511 Educational Statistics 3-3-0
This course is an introduction to statistical analysis methods. Topics to be covered include means, standard deviations, variances, sampling distributions, hypothesis testing z-tests, t-tests, correlation/regression and, if time permits, Chi-squared tests. This course emphasizes a conceptual understanding of statistics and their application in educational research rather than mechanical calculation.

GSE 512 Research Methods I 3-3-0
This introductory course in research in education is designed for those students who wish to offer themselves as candidates for the degree of M.A. or M.Ed. at Bishop's University but it will also be useful for teachers who wish to evaluate current research in education. This course will include topics such as the role of research in education, selection of a research topic, generation of a research question, research methods, qualitative and quantitative analysis, interpretation of data, limitations of research, and presentation of research results.

GSE 513 Research Methods II 3-3-0
This course in research in education is designed for those students who wish to offer themselves as candidates for the degree of M.A. at Bishop's University but it will also be useful for teachers who wish to evaluate current research in education. This course, grounded in an interpretive qualitative paradigm, will include topics such as the role of research in education, selection of a research topic, gaining entry to a research site, generation of a research question, data collection methods, systems of analyses such as constant comparison and grounded theory, interpretation of data, limitations of research, and presentation of research results.
Prerequisite: GSE 512

GSE 515 Research Methods III 3-3-0
This course in research in education is designed for those students who wish to offer themselves as candidates for the degree of M.A. at Bishop's University but it will also be useful for teachers who wish to evaluate current research in education. This course, grounded in a positivistic, quantitative paradigm, will include topics such as the role of research in education, selection of a research topic, generation of a research question, statistical analyses, interpretation of data, limitations of research, and presentation of research results.
Prerequisite: GSE 512

GSE 516 Introduction to Action Research 3-3-0
This course has been designed to enable participants to carry out action enquiry, to understand the fundamental principles of action research and to explore action research as a form of professional development. The course will address issues related to the individual, the school, and the community.

GSE 520 Selected Topics in Special Education 3-3-0
This course has been designed to provide the student with the opportunity to examine recent developments in special education.

GSE 521 The Exceptional Learner 3-3-0
This course in special education will examine the characteristics of learners with diverse special needs, including the psychological, medical and sociological aspects of the various exceptionalities and the various ways in which they are educated. The content of this course will be of relevance to administrators and regular classroom teachers as well as to special educators. Participants in this course will critically examine the many approaches to facilitating learning for individuals with learning disabilities and other exceptionalities.

GSE 524	Behavioral Disorders	3-3-0
This course will examine multiple types of emotional problems and behavioral disorders challenging students in today's classrooms. Theories and principles explaining these difficulties as well as how to analyze patterns and see how problems develop will be explored. Students will critically explore methods for dealing with problem behaviors in the classroom.		
GSE 530	Selected Topics in Media Literacy	3-3-0
This course has been designed to provide the student with the opportunity to examine recent developments in media literacy. It will foster an expanded understanding of media and media technology, including the impact on our society and the shaping of individual and collective values and beliefs.		
GSE 550	Selected Topics in Educational Technology	3-3-0
This course has been designed to provide the student with the opportunity to examine recent developments in educational technology.		
GSE 552	Technology in Education	3-3-0
This course will focus on the potential which technology offers for the enrichment of learning and teaching. Drawing on current research students will examine issues of appropriate effective integration of technology in the curriculum such as the need for value-added approaches. The course will focus on modern technologies including applications of e-learning.		
GSE 553	Technology and the Role of the Educator	3-3-0
This course examines the role of the educator in an increasingly technological world. Modern advances in technology have seen a concomitant change in the role of the teacher from one who passes on knowledge to one who mentors students in developing their knowledge. Students become active in their educational activities. This course will examine theoretical perspectives on the role of the educator in a technologically-defined world and the implications for current and future practices. The students in this course will also learn how to create student-centered applications of technology in the classroom, allowing students to make their own products and their own content.		
GSE 559	Research in Educational Technology	3-3-0
This course has been designed to provide students with the opportunity to search and locate the literature relevant to their selected topics of interest. Students will acquire skills in conducting both electronic and hand searches. They will critically analyze the literature base related to one facet of educational technology and produce a scholarly, written review of that literature. This literature review will culminate in research questions, objectives, or hypotheses that align with the literature reviewed. This course is compulsory for students registered in the MA program with emphasis in educational technology and should be taken near the end of their program.		
GSE 560	Selected Topics in Literacy	3-3-0
This course allows students to examine research related to current issues in literacy learning and teaching. Specific topics vary from year to year to take advantage of the special expertise of the faculty.		
GSE 561	Language and Literacy Studies	3-3-0
Through this course, students examine current trends, issues, theory and research in teaching and learning in the English language arts classroom. Topics include media literacy, critical literacy, multiliteracies, multicultural curricula, and language learning and teaching across the curriculum.		
GSE 564	Learning to Write and Writing to Learn	3-3-0
This course is designed for teachers who are interested in exploring many different approaches to learning to write in different genres. Participants should be prepared to engage in a great deal of writing as the philosophy of the course is one that is grounded in the notion that "we learn to write by writing".		
GSE 570	Selected Topics in Educational Leadership and Administration	3-3-0
This course has been designed to provide the student with the opportunity to examine recent developments in educational leadership and issues related to educational administration.		
GSE 571	Principles of Educational Leadership	3-3-0
This course, designed for teachers and administrators interested in becoming effective leaders, is an introduction to the study of educational leadership. Participants in this course will be introduced to the theory and research literature on issues of leadership in general and school leadership in particular. Students will explore topics such as school-based management, invitational leadership, flexible leadership, professional collaboration and individual initiative.		

GSE 573	Creating and Leading Effective Schools	3-3-0
This course aims to inform practicing and aspiring school leaders about ways to mobilize a school staff toward greater effectiveness in reaching a joint mission. It examines current research and school improvement literature with a view to developing practical strategies for whole school assessment, evaluation and development.		
GSE 574	Understanding Professional Development	3-3-0
This course will explore the many ways teachers develop as professionals, both individually and as members of educational organizations. Participants in the course will be involved in reading about and discussing topics such as the following: What knowledge is held by good teachers? What does teacher reflection contribute to development? What can be done by organizations to promote teacher learning and development? How are student learning and teacher learning related? What are the possibilities for designing professional development programs for teachers?		
GSE 575	Educational Leadership Theories	3-3-0
This course is designed to provide students the opportunity to examine a set of educational leadership theories that have been or are currently used in school settings. Participants will be encouraged to critically examine the theories that are presented and explore the implication of using them in educational settings.		
GSE 580	Selected Topics in Second Language Learning	3-3-0
This course has been designed to provide the student with the opportunity to examine recent developments in second language learning.		
GSE 581	Introduction to Linguistics for Language Teaching	3-3-0
This course is a survey of linguistic theory as it relates to second language teaching. Students are exposed to major themes in linguistics as a basis for the study of second language teaching and learning.		
GSE 582	Language Acquisition	3-3-0
The purpose of this course is to examine ways in which theories of language acquisition have implications for the teaching and learning of a second language. The course includes a study of important research in the field of language acquisition and its relevance to second language teaching.		
GSE 583	Course Design	3-3-0
This course involves the application of the principles of instructional design to the development of second language courses and programs. Students will develop components for ESL teaching within a variety of instructional frameworks.		
GSE 584	Teaching English Grammar	3-3-0
This course provides an overview of the theoretical background for the teaching of grammar. It includes a review of major grammatical patterns of English, as well as a focus on learner errors and the design of material appropriate to the teaching of grammatical concepts.		
GSE 585	Methods in Second Language Teaching I	3-3-0
This first course in methodology introduces the student to classroom practices in teaching English as a second language. It includes a historical overview of approaches to second language teaching. The course focuses on the selection of teaching material and classroom techniques for second language teaching.		
GSE 586	Methods in Second Language Teaching II	3-3-0
The second course in methodology extends the content covered in Methods I. Classroom practice and development of curriculum resources are the major topics covered in this course.		
<i>Prerequisite: GSE 585</i>		
GSE 587	Assessment and Evaluation in Second Language Teaching	3-3-0
This course includes an exploration of design strategies for effective assessment and evaluation procedures for second language teaching. It combines the theory of effective assessment with practical applications for the second language classroom.		
GSE 588	The Second Language Learner	3-3-0
This course focuses on a learner-centered approach to second language teaching. It emphasizes the importance of individual learner backgrounds, special needs of learners, individual learning styles and strategies, and cultural considerations in the teaching of English as a Second Language.		
GSE 589	Observation and Practice Teaching in Second Language Classrooms	6-3-0
This six-credit course involves the observation of experienced second language teachers in their classrooms, as well as peer observation of students in the course. Students will develop and teach lessons under supervision at both the primary and secondary levels. Students may observe and teach in adult classes.		

GSE 590 The Creative Process in Education 3-3-0
Students will explore the creative process as it affects and is affected by the relationship between the teacher and the learner. Students will engage in creative projects and monitor their own creative process. Through readings, discussion, and experiences with different media, students will learn to articulate and evaluate learning within a creative process framework.

GSE 591 Studio Inquiry I 3-3-0
In this course students identify the content and the processes essential to their on-going studio performance. Students are expected to develop parallel inquiry into exhibitions, installations, performances, documentations, notation systems and related readings. Evaluation is based on workshop and seminar participation, studio performance and class presentations. This course may be continued as GSE 592.

GSE 592 Studio Inquiry II 3-3-0

GSE 593 Selected Topics in Art Education 3-3-0
This is a seminar course offering students the opportunity to study various aspects of art education. Specific topics vary from year to year to take advantage of the special expertise of the faculty.

GSE 594 Readings in Art Education 3-3-0

This is a seminar course in which students study selected texts to gain insight into formative notions and recurring issues in art education. Assignments include historical research questions arising out of an examination of personal experiences in the teaching and learning of art.

GSE 595 Symbolic Imagery: Art Therapy and Art Education 3-3-0

As symbols inform the artist and imagery, this course acquaints students with the field of art therapy and its implications with art education. Through an exploration of personal imagery and group communication in the studio workshop, students develop an art therapy methodology within the context of relevant theories.

GSE 596 Art and Technology: an on-going dynamic 3-3-0

This course addresses the assumptions that underlie the discourse about art and technology. Technology has and continues to be used as a part of art, in the service of art, and as forms of art. Correspondingly each technological innovation in art raises a new set of practical, theoretical, and aesthetic questions that challenge theoretical underpinnings within art education. A review of some of the types of technology-based art, with examples of work by some prominent artists, establishes the range of difficulties that accompany the introduction of new technologies into art and the effects of these new visual languages on discourses in art and art education.

GSE 700 Thesis 21 credits

This 21-credit research study, completed under the supervision of a thesis supervisor assigned by the School of Education, permits the M.A. student to conduct a research study. A successful graduate level thesis is an academic document that must meet the standards of scholarship established by the appropriate research community.

Prerequisite: Successful completion of GSE 705: Thesis Proposal

GSE 701F Monograph 9 credits

This 9-credit monograph, under the supervision of a mentor assigned by the School of Education, permits the student in the final stages of his/her program to use the knowledge acquired to inform the designing and composing of an original piece of scholarly writing. This document can take a variety of forms including a research report, a book, or a critical review of a body of literature. A successful graduate level monograph is an academic document that must meet the standards of scholarship established by the appropriate research community.

Prerequisite: Completion of all course requirements for the Master of Education degree with a concentration in Curriculum Studies or Educational Leadership.

GSE 702F Curriculum Studies Project 9 credits

This 9-credit independent project, under the supervision of a mentor assigned by the School of Education, permits the M.Ed. student in the final stages of his/her program to draw on various appropriate and significant experiences and insights to inform the designing of a novel unit of study and to facilitate the inquiry into its enactment. Each project will seek to inform practice through a significant research component.

Prerequisite: Completion of all course requirements for the Master of Education degree with a concentration in Curriculum Studies.

GSE 703F Project in Educational Leadership 9 credits

This 9-credit independent project, under the supervision of a mentor assigned by the School of Education, permits the M.Ed. student in the final stages of his/her program to draw on various appropriate and significant experiences and insights and to apply this knowledge to a real-life problem in educational management or leadership. The student starts with an analysis of the problem and the design of a plan of action (to be approved by the mentor). However, it is expected that each project will seek to inform practice through a significant research component.

Prerequisite: Completion of all course requirements for the Master of Education degree with a concentration in Educational Leadership.

GSE 704F Art Exhibition and Supporting Documents 9 credits

The nature of the 9-credit art exhibition and supporting documents will be determined through consultation between the student and the supervisor.

GSE 705F Thesis Proposal 3 credits

This 3-credit independent study, completed under the supervision of a thesis supervisor, must be completed and defended prior to beginning the data collection phase of the thesis. The proposal should include a review of the literature and a complete description of the research design including statement of the problem, data collection procedures and instruments, and methods of analysis.

Prerequisite: Completion of all course requirements for the Master of Arts in Educational degree.

GEA 522 The Principal 3-3-0

This course will examine the relationship of the school principal with various constituencies, including students, teachers, the larger educational community and parents. Expectations and skills related to the roles and responsibilities of the school principal will be explored.

GEA 523 School and Community Relations 3-3-0

This course is designed to facilitate the development of communication and leadership skills necessary for positive school and community interactions. Students will examine contemporary issues from both a theoretical and practical perspective and develop strategies which address a variety of complex situations.

GEA 528 Examining Administration in Action 3-3-0

This course will provide current and aspiring administrators with the opportunity to plan and conduct a field study. The study will include applied research and a comprehensive written report concerning selected roles of the school administrator.

GSL 582 Teaching English to Adults 3-3-0

This course provides students with an overview of theory related to the teaching of adults. It focuses on the application of this theory to the teaching of English as a second language to adults: the development of a needs analysis, selection and design of appropriate materials, and the involvement of adult learners in the learning process.

GSL 589 Individual Project in the Teaching of English 3-3-0

This course may be taken with the special permission of the School of Education. It provides an opportunity for a student to pursue an area of special interest in the field of second language teaching.



Humanities

The Division of Humanities offers courses and programs in the traditional liberal arts disciplines of Classical Studies, Languages, Literature, Philosophy, History and Religion; interdisciplinary programs in Liberal Arts and in Arts Administration; as well as programs (involving both historical and practical study) in the three creative arts of Drama, Fine Arts and Music.

The Division of Humanities also offers an entry-level program for a limited number of students, allowing them to register as Divisional Majors (DHM) for a maximum of two semesters. After two semesters of full-time study are completed, students must enrol in one of the regular Honours, Major or Minor programs offered in the Division of Humanities, or in another Division of the University.

Transfers from Other Programs

Students who wish to transfer from other departments or programs in the University into a program in Humanities must have obtained a 60% average on all courses taken. However, students who are not immediately accepted into one of the regular departments or programs may register as special undergraduate (SFU) students and will be permitted to take courses for a further two semesters. During this period the normal regulations with respect to program changes will apply.

Divisional Requirements

In order to ensure that students enrolled in the Division of Humanities do not focus their education too narrowly, all majors and honours are required to complete at least three credits in each of the four categories listed below. While these requirements will not in themselves ensure against excessive specialization, it is hoped that they will lead students to find and pursue various areas of interest.

Category I: Languages and Literature, including Greek, Latin, English and French, **with the exception of “101” courses in Modern Languages; 100-level courses in English as a Second Language; and 130-level courses in Études françaises et québécoises.** CLA 212 and 213, REL 218 and 219 will also be considered as Category I courses.

Category II: Drama, Fine Arts and Music

Category III: Classics, History, Liberal Arts, Philosophy and Religion

Category IV: External (Courses offered in Natural Sciences and Mathematics, Social Sciences, Business and Economics, and Education)

No courses offered by the department in which the student is doing an honours or major may count towards fulfilling these requirements. Students with program combinations which require **more than 72** credits are exempt from these divisional requirements.

Departmental Honours Programs

Students must normally obtain a 70% average, as calculated from the best 60 credits in the Honours discipline (including cognates), in order to graduate with an Honours degree in any Humanities Program. (See under individual departments for particular honours requirements.)

Graduation “with Distinction”

Students achieving an average of 80% or better in the last 60 credits of their program, excluding electives and core curriculum requirements, will have the notation “with Distinction” added to their transcript upon graduation.

Majors – School of Education and Humanities Programs

Students in the School of Education Secondary Education Program must register as Double Majors - in Secondary Education and in an area of specialization in another division. In the Division of Humanities areas of specialization include Drama, English, Fine Arts, French, History, Music, and Spanish. Specific courses and program requirements for these areas of specialization are listed in the Academic Calendar under “School of Education”. All questions concerning courses and requirements should be referred to the Chair of the School of Education.

ILT 102 Library Research Skills for the Humanities Lab

1-0-1

The objective of this laboratory course is to introduce students to the skills necessary to effectively complete their research assignments, including the correct use of library resources such as the online catalogue, periodical indexes and other relevant databases. Other areas of study include the identification of key terms for effective searching, productive use of the internet, and the critical evaluation of retrieved resources. Academic integrity, plagiarism and the correct citation of print and online sources are also covered. Taught in conjunction with a research-based course, the specific resources relevant to research in the Humanities are introduced, and the students retrieve the material necessary to complete the essays for their particular course. The course is taught in the library’s electronic classroom, and each week the students are given the opportunity for practical experience.

To see how ILT 102 is currently linked to your program, check requirements under various departments in the Humanities (e.g., Modern Languages). Course is open to all students, regardless of program.

Division of Humanities

Arts Administration Option

This 72-credit interdisciplinary program combines the study of business, creative arts, and arts administration to provide students with the skills and knowledge needed to participate in the business and organizational areas of the cultural sector. Students normally begin the program with core courses in Business and one of the creative arts (Drama, Fine Arts or Music). As they proceed with their core options they undertake the 12 required credits in Arts Administration. Towards the end of the program, students will enrol

in the practicum, AAD353, and will be placed in a cultural venue consistent with their disciplinary focus. In addition to the practicum course, there are several opportunities for internship employment on campus in the Centennial Theatre, the University Gallery, the Music Chez Nous Concert Series, the Eastern Townships Research Centre and other campus-based professional organizations.

The program director, in consultation with a steering committee made up of members from all four departments, will oversee the academic development of the program. Students should consult their departmental representative or the Dean of Business or Humanities for advice concerning program requirements and practicum (co-op).

Students are permitted register in a double major combining Arts Administration with another core area—Business, Music, Fine arts, or Drama. Core courses may be double-counted towards the two majors.

Core Courses: Business (30 credits)

Full descriptions of the following can be found in the calendar section of the Williams School of Business. These courses will provide a foundation in the major functional area of business management. Please note that students will also need to take the mathematics prerequisites for these courses. (Inquiries regarding other prerequisites should be addressed to the Dean of the Williams School of Business.)

- BAC 121 Purposes of Accounting
- BFN 201 Finance I
- BHR 221 Organizational Behaviour
- BMA 140 Statistical Analysis for Business Decisions I
- BMG 112 Management Theory and Practice
(plus ILT100 a 1-credit lab)
- BMG 215 Introduction to International Business
- BMK 112 Consumer Behaviour
- BMK 211 Marketing Management
- ECO 102 Principles of Economics: Microeconomics
- ECO 103 Principles of Economics: Macroeconomics

Core courses: Drama, Fine Arts, or Music (30 credits)

Full descriptions of these courses can be found in the calendar sections of the departments. Concentration in one of these departments will ensure that students gain a solid grounding in one of the creative arts. (Inquiries regarding prerequisites should be addressed to the Dean of Humanities.)

Drama (30 credits)

- DRA 101 Introduction to Technical Theatre
- DRA 102 Introduction to Theatre
- DRA 110 Introduction to Theatre II
- DRA 131 Acting I
- DRA 201 Contemporary Canadian Drama
- DRA 211 Ritual and Theatre **OR**
- DRA 212 Theatre and the State
- DRA 222 Introduction to Shakespeare

One course (3 credits) chosen from:

- DRA 250 Intermediate Technical Theatre Stagecraft
- DRA 253 Technical Direction
- DRA 254 Stage and Production Management

Two other courses (6 credits) in Drama

Fine Arts (30 credits)

- FIH 102, formerly FIN 102 Survey of Western Art II
- FIH 104, formerly FIN 104 20th Century Art to 1950
- FIH 105, formerly FIN 105 Art Since 1950

One Art History course (3 credits) at the 200 level

Comparative Arts: Two courses (6 credits) chosen from:

- Chemistry 132 Chemistry of Art Restoration
- Fine Arts 209/ Physics 112 Introduction to Holography
- Fine Arts 218 Digital Imaging for the Artist
- Fine Arts 222 Art Therapy
- Fine Arts 235 Museology
- Fine Arts 301 Art Education: Theory and Practice
- See also: Comparative Arts courses listed in
Fine Arts section of Calendar
- Four courses (12 credits) in Studio Art

Music (30 credits)

9 credits from the “00”, “10”, “40”, cycles (Music Literature/History)

9 credits from the “30” cycle (Theory and Composition)

2 credits from the “50” cycle (Ensemble)

4 credits from the “60” cycle (Performance Study)

6 additional credits in Music

Required courses: Arts Administration (12 credits)

These three specialized courses and practicum will provide students with specific knowledge of arts administration and hands-on experience in the program option. Students normally take these courses in the last 60 credits of their program.

AAD 250a Arts Administration: Internal Operations 3-3-0

The course will examine various types of arts organizations from the perspective of the management of artistic resources: accounting, finance, human resources, project management and production organization.

AAD 251b Arts Administration: The External and Legal Environment 3-3-0

This course will examine the social/political context of cultural operations. Among the topics analysed are: the legal aspects in not-for-profit organizations, board governance, labour issues and the status of the artist, funding structures - government and private sector, networking.

Prerequisite: AAD 250a or permission of instructor

AAD 252 Arts Administration: Communications and Marketing 3-3-0

The course will examine the area of public relations and business communication as it relates to cultural promotion: marketing, press releases, advertising, sponsorship, consumer behaviour.

AAD 353 Arts Administration: Practicum 3-3-0

This course will be a directed independent study in which the student is placed in a range of posts in the arts industry and in not-for-profit cultural agencies.

Prerequisites: AAD 250, 251, 252

Certificate in Arts Management (30 credits)

Description and objectives:

The Certificate in Arts Management has been designed to provide students who are working or interested in working in the artistic and cultural fields as managers with a professional background in Arts Administration. The program is composed of ten 3-credit courses (for a total of 30 credits) in Business Administration, Arts Management, and in the Arts.

Admission requirements: (*See Regulations for Certificate Programs*).

I. Required courses 18 credits:

1. 3 courses in Business Administration (9 credits)

BMG 112ab	Management Theory and Practice	3-3-0
BMK 112ab	Consumer Behaviour and Introduction to Marketing	3-3-0
BAC 121ab	Purposes of Accounting	3-3-0

2. A minimum of 3 courses in Arts Management (9 or 12 credits)

AAD 250ab	Arts Administration I: The External and Legal Environment	3-3-0
AAD 251ab	Arts Administration II: Internal Operations	3-3-0
AAD 252ab	Arts Administration III: Communications and Marketing	3-3-0
AAD 353ab	Arts Administration IV: Practicum	3-3-0

II. Optional courses:

3 or 4 optional courses (9 or 12 credits) in the Arts — Drama, Fine Arts or Music. Courses should be taken in one of the three disciplines only.

DRAMA:

DRA 101ab	Introduction to Technical Theatre	3-3-3
DRA 102ab	Introduction to Theatre	3-3-0
DRA 201ab	Contemporary Canadian Drama	3-3-0

And any other course in dramatic literature.

FINE ARTS:

FIH 101ab, formerly FIN 101ab	Survey of Western Art I	3-3-0
FIH 102ab, formerly FIN 102ab	Survey of Western Art II	3-3-0
FIH 240ab, formerly FIN 240ab	Canadian Art	3-3-0
FIH 104ab, formerly FIN 104ab	Twentieth Century Art to 1950	3-3-0
FIH 105ab, formerly FIN 105ab	Art Since 1950	3-3-0
FIH 116ab, formerly FIN 116ab	Northern Renaissance Art	3-3-0
FIH 231ab, formerly FIN 231ab	Realism through Post-Impressionism	3-3-0
FIN 235ab	Museology	3-3-0
FIH 250ab, formerly FIN 250ab	Women in Art	3-3-0

MUSIC:

MUS 110ab	The Art of Listening I	3-3-0
MUS 111ab	The Art of Listening II	3-3-0
MUS 130ab	Rudiments of Music Theory	3-3-0

And any music literature course with a -0- as a central digit.

Divisional Major in Popular Culture (48 Credits)

This interdisciplinary Major in Popular Culture allows students to study various forms of popular culture—in literature, film, music, television, journalism, photography, advertising, and the internet—from the perspectives of history, theory and criticism.

Required Courses (15 credits):

ENG 102	Approaches to Media Studies
ENG 236	Popular Culture
LIB 20X,	
LIB 20Y,	
LIB 30Z	(exit course)

Electives (33 credits):

Category I

(Classics, History, Philosophy, and Religion – 9 credits):

CLA 150	The Ancient World in Film and Television
HIS 332	The Celluloid Republic
HIS 371	A History of Communications
PHI 247	Philosophy and Film
REL 237	Religion and Film

Category II *(Drama, Fine Arts, Music – 9 credits):*

DRA 170	Introduction to Film
DRA 172	Canadian Cinema
FIH 108	History of Photography
FIN 218	Digital Imaging for the Artist
MUS 101	Rock
MUS 102	Music for the Movies
MUS 103	History and Analysis of Jazz to 1945
MUS 104	History and Analysis of Jazz 1945-Present
MUS 105	World Music
MUS 109	Music and Theatre

Category III *(English and Modern Languages – 9 credits):*

ENG 212	Crime Stories: The Great Detectives
ENG 217	Arthurian Tradition
ENG 218	The Gothic Tradition
ENG 219	Popular Narrative: The Graphic Novel
ENG 220	Popular Narrative: Fantasy
ENG 278	Science Fiction in Literature and Film
ENG 280	Classics of the Post-War Cinema
ENG 281	The Films of Marlon Brando
ENG 282	Film Adaptation
ENG 284	Film Noir
ENG 285	Journalism
ENG 286	On-line Journalism
ENG 287	Image and Communication
ENG 288	Crime Pays: the Gangster Film Genre
ENG 289	Film History
ENG 290	The New Journalism
ENG 291	Film Theory
ENG 359	Approaches to Canadian Culture (Canadian Studies)
ENG 381	The Evolution of the Fairy Tale in Literature and Film
ENG 382	Screenwriting
FRA 207	Mise à jour grammaticale
FRA 290	Censure, religion, campagne et coureurs de bois
GER 370	Introduction to German Film

- GER 371 East German Cinema: from Rubble Films to Ostalgic
 ITA 309 Italian Cinema and Society
 ITA 310 Italian Cinema and Society II

Category IV (*Outside Division – 6 credits*):

- ESG 264 Outdoor Recreation
 PSY 203 Sports Psychology: Performance Enhancement
AND/OR
 PSY 204 The Social Psychology of Sports and Exercise
 SOC 105 Media and Society I
 SOC 241 Cinema
 SOC 281 Communications Methods
 SOC 293 Visual Sociology
 SOC 294 Sociology of Tourism
 SOC 381 Media and the Environment

Students will be required to attend two popular culture events on campus per semester. They may substitute one internship course (3 credits) as an Elective.

Divisional Minor in Popular Culture (24 credits)

Students must take English 102 and 236 as well as Liberal Arts 20X and 20Y. They choose their remaining courses from the list of Electives for the Divisional Major.

Classical Studies

Socrates! Julius Caesar! Gladiators! The Olympic Games! Cleopatra! The Sphinx!

A student in the Classical Studies department will enter the world of the ancient Mediterranean. We focus especially on the civilizations of Greece and Rome and offer courses in their literature, mythology, history, culture, art and archaeology. Students have the opportunity to learn Latin (the language of Roman emperors and Christian popes) and Greek (the language of philosophy, tragedy and the New Testament). The courses offered by the faculty of the Classics department are also supplemented by related courses in the departments of Philosophy, Religion and the Liberal Arts. Many of our classes do not have prerequisites and thus we welcome students from all disciplines. In this regard most of the 200 level courses are suitable for students in their first year. All you need are interest and enthusiasm to begin your journey into the Classical past.

An **Honours in Classical Studies** consists of 60 credits.

Requirements:

An overall average of 70% or more in courses counting towards the honours.

A minimum of 24 credits in Latin and Greek.

A minimum of two third-year courses.

CLA400 and CLA401 (thesis)

A **Major in Classical Studies** consists of 42 credits; 24 credits are required for a minor. Majors must take a minimum of two third-year courses.

A **Minor in Classical Languages** consists of 24 credits in at least two of Hebrew, Greek or Latin, with at least 12 credits in one classical language.

A **Minor in Classical Art** and Archaeology consists of 24 credits: Classical Studies 120 and 240; Classical Studies 110, 205, 206, 207, 208; Classical Studies 365 or 366.

Classical Studies Concentrations in the Liberal Arts

These concentrations consist of 36 credits or 12 courses.

Concentration in Greek Civilization

Requirements: Greek 101, and Classical Studies 100, 120, 205, 209, 210, 212, 219, 220, 223, 325

Concentration in Roman Civilization

Requirements: Latin 101 and 102, Classical Studies 100, 120, 130, 207, 208, 223, 225, 260, 280, 325

Cognate Courses

The following courses in classical studies are recognized as cognate in other departments:

Classical Studies 120ab, 209a, 210b, 260a in History

Classical Studies 212a, 213b, 219a, 220b in English

Classical Studies and 219a, 220b in Drama

Classical Studies 110ab, 325ab, 120ab and 350ab in Fine Arts

Classical Studies 250ab, 350ab in Women's Studies

Classical Studies 350ab in Communication and Cultural Studies

Classical Studies 100a/b You Are What You Eat, Food, Community and Culture in the Greek and Roman World 3-3-0

The aim of this course is to introduce students to the civilizations of Greece and Rome. We will explore language, literature, art, religion, myth, history, politics, geography, science and technology, as we investigate the many aspects of food production and consumption from cannibalism in Greek tragedy to the best way to stuff a dormouse. At the end of the course we will cook a meal and celebrate the Classical world.

Prerequisite: Students must be enrolled in a Classical Studies Honours, Major, Minor or Concentration

Classical Studies/Religion 107a Introduction to Biblical Archaeology 3-3-0

This course is an introduction to the methods and terminology of archaeology used in the eastern Mediterranean region of Syria-Palestine. Students will gain some familiarity with the methods and techniques of archaeological research, and an overview will be provided of the material remains of the cultures of Syria-Palestine (including the ancient Israelites, Philistines, Canaanites, Moabites and others), in order to illuminate the religious beliefs, art and cultural activities of these groups in the centuries preceding the Christian era.

Classical Studies/Religion 109a Egypt & Mesopotamia: From the Rise of Civilisation to the Persian Conquest 3-3-0

The region of Mesopotamia (modern Iraq) saw the development of the first complex urban society more than 5000 years ago. About the same time, a second complex society, Egypt, was forming along the banks of the Nile River in Africa. Employing a mixture of historical texts and archaeological research, this course will give an overview of ancient Egypt and Mesopotamia covering the time from the Neolithic Period (ca. 8500 BC) to the Persian conquest in the 6th century BC. It will begin with the formation of the first civilizations, the development of agriculture, writing, cities and major building projects in the form of temples and pyramids. In addition to examining the lives and political careers of important historical characters, the course will also explore the religious beliefs, and techniques of astronomy, medicine and warfare prevalent at the time.

Classical Studies/Fine Arts History 110ab The Art and Archaeology of Ancient Egypt 3-3-0

A survey of the art and architecture of ancient Egypt from the Pyramids to the Valley of the Kings and an introduction to the archaeological discoveries made in Egypt in the Twentieth century.

Classical Studies 120ab An Introduction to Classical Archaeology 3-3-0

A survey of the history of classical archaeology from the discoveries of Schliemann at Troy and Evans at the Palace of Knossos and a study of the techniques of modern field archaeology.

Classical Studies/Religion 122a World Religions I: Ancient Mediterranean Religions 3-3-0

An introduction to Mediterranean religions from the time of Alexander the Great (356-323 BCE) to the emergence of Christianity as a prominent Roman religion in the late second century CE, including Mystery religions, Zoroastrianism, Judaism, Mithraism, popular philosophical options of piety such as Stoicism and Epicurianism, as well as different forms of divination technologies such as astrology, magic, dream analysis and alchemy.

Professor Murray

Classical Studies 130ab Sports and Games in the Ancient World 3-3-0

The Olympic Games in ancient Greece and the chariot races in Rome's Circus maximus allowed athletes to compete and spectators to enjoy themselves under the hot Mediterranean sun. Athletic training was useful in preparing men for war, but women also trained and competed in sports events. People of the ancient past liked to amuse themselves just as we do today, but dramatic festivals and even gladiatorial combat had religious origins. In this course we will use the sporting and recreational activities of the Greeks and Romans and their Mediterranean neighbours as a lens to reveal aspects of these ancient societies.

Classical Studies/Religion 146ab Women in Religion 3-3-0

An investigation of the religious lives of early pagan, Jewish, and Christian women in the context of the Greco-Roman world. Literary and epigraphical sources from the fourth century BCE to the third century CE are analyzed in order to determine women's roles, rites and practices, with special attention to constructions of gender in the Greco-Roman world.

Professor Murray

Classical Studies 150ab The Ancient World in Film and Television 3-3-0

Movies and television have shaped our ideas about Greek and Roman myth, history and civilization. In this course we will study "sword and sandal" films and television as popular art forms and their relation to the ancient literary and visual sources.

Classical Studies/Fine Arts History 205ab Greek Art and Architecture 3-3-0

Western art and architecture begin in ancient Greece. From miniature vases to monumental statues of ivory and gold, we will explore the creations of potters and painters, sculptors and architects and study Greek art from the Bronze age to the time of Alexander the Great.

Classical Studies/Fine Arts History 206ab Early Christian and Byzantine Art 3-3-0

This course examines the ways in which the Christians adapted elements from Greek, Roman and Near Eastern art and architecture to their religious beliefs and requirements and also studies the development of this new Christian art in the Byzantine Empire. Major topics include: Catacomb art, early Christian and Byzantine architecture, mosaic and painting, manuscript illuminations, textiles and the minor arts.

Classical Studies/Fine Arts History 207ab Art of the Etruscans and the Roman Republic 3-3-0

In this course we will begin with a study of the colourful wall paintings of Etruscan tombs where men and women drink and dance and panthers and lions guard the dead. Once rulers of Rome, the Etruscans and their art declined as the Roman Republic grew powerful. We will examine how the Romans developed an innovative art and architecture which expressed the values of their society.

Classical Studies/Fine Arts History 208ab Art and Architecture of Imperial Rome 3-3-0

A survey of Roman art and architecture from the first century A.D. to the fourth century A.D. The course examines the use of art as propaganda and the tension between tradition and innovation in Roman art.

Classics Studies 209a The History of Ancient Greece I: The Rise of the City State 3-3-0

Greek history from the Minoan-Mycenean age to the Archaic period. Crete, Mycenae, the Trojan War, the development of the polis, ancient Sparta, Tyranny, democracy at Athens.

Classics Studies 210b The History of Ancient Greece II: The Road to Empire 3-3-0

Classical Greece; the Persian Wars, the Athenian Empire, the development of democracy, Periclean Athens, the Peloponnesian War, the rise of Macedonia. Alexander the Great.

Classical Studies 212a Classical Mythology I 3-3-0

The origin and development of Graeco-Roman mythology, and the importance of myths in understanding ancient literature and religion: theories of myth, cult and ritual, mystery religions, the epic tradition. Greek sources are read in translation.

Classical Studies 213b Classical Mythology II 3-3-0

Myth and tragedy, myth and history, lyric poetry, Roman mythology. Greek and Latin sources are read in translation.

Classical Studies/Religion 218a Early Christian Literature I 3-3-0

A seminar which introduces early gospels (both canonical and non-canonical), examined within the historical context of the Graeco-Roman world during the first and second centuries CE. Distinctive features and characteristics of each text will be examined in order to gain insight into their historical, social and political environments.

Professor Murray

Classical Studies 219a The Greek Tragic Theatre I 3-3-0

Myth and tragedy, origin and development of the Greek theatre; representative tragedies of Aeschylus and Sophocles, in translation.

Classical Studies 220b The Greek Tragic Theatre II 3-3-0

Study of the later works of Sophocles and representative works of Euripides. (In translation)

Classical Studies 223b Political Studies 223b Democracy in the Ancient World 3-3-0

The idea of government by the people is highly valued today, but it was first given the name of "demokratia" (democracy) in ancient Greece. The most famous example in Greece is Classical Athens, but democratic elements appeared in many other ancient states, including republican Rome. The course will examine in detail how democracy worked in Athens, Rome, and various other ancient societies: how it began, who could participate, who was left out, what ancient writers thought of it and what were the results of democratic government on those inside and outside of the community.

Classical Studies 225ab Latin Literature 3-3-0

In this course we will read selections of Latin poetry and prose (in English translation), including epic poetry, elegy, satire, drama, history, oratory, and didactic literature. Topics to be treated will include the influence of Greek literature, analysis of style and structure, literature as propaganda, and using literature as a means of access to Roman culture and history.

Classical Studies/Religion 236b Death and Dying in the Ancient World 3-3-0

This course explores the myths, rituals and beliefs associated with death and dying in antiquity. Topics to be covered include myths associated with the afterlife; books of the dead; magic and death rituals; and understandings of heaven, hell and judgement.

Prerequisite: Religion 100a or 101b or 122a or permission of instructor

Professor Murray

Classical Studies/Fine Arts History/Religion 238 Greece, Land of the Gods 6-6-0

This six-credit course examines the sacred art and architecture of ancient Greece from Mycenae to Byzantium on site in Greece. Offered in the Spring semester. After preliminary lectures on campus students will spend two weeks traveling to the major sacred sites of mainland Greece.

Classical Studies 240ab Signs of the Past: Archaeological Interpretation 3-3-0

A continuation of Classics 120ab with the emphasis on the techniques and methodology of archaeology. Topics include the use of artifacts in creating chronologies and theories, preservation and conservation of sites, ethical questions and problems relating to archaeological excavation. Sites from Greece, Italy and the American Southwest will be studied. Computer simulations.

Classical Studies 241ab/Religion 116 The Archaeology of the Transjordan: Archaeological Field Methods 6-6-0

Students registered in this course will participate in a six-week archaeological expedition to Jordan. Working under the supervision of professional archaeologists, students will be involved in the excavation and recording of artifacts recovered at Khirbat al-Mudayna, Jordan as part of the Wadi Ath-Thamad Excavation Project. Students will learn to take elevations, draw top plans and balk sections, write daily and weekly field

reports, and related activities. During the season, students will take part in the educational program of the expedition, which will include seminars, lectures by visiting scholars on the archaeology and history of Jordon, plus field trips to museums, neighboring excavations and major sites.

Classical Studies 245 The Art and Archaeology of the American Southwest 3-3-0

This travel course to the American Southwest will focus on the Art, Architecture and Archaeology of the pre-historic Anasazi Indians and their influence on Amerindian and contemporary art and architecture. Also an opportunity for students of archaeology to observe the methods, theories and techniques they have studied in class as put into practice on actual sites in the Southwest. Offered in the Spring semester only. Contact the Classics department for more information.

No prerequisites.

Classical Studies 250ab Sex and Gender in the Ancient World 3-3-0

This course will look at the ways that women and men of the ancient Mediterranean world interacted with each other, and at how ideas about sexuality and gender roles affected people's lives. Topics to be examined will include marriage and divorce, conception and contraception, masculine and feminine ideals, gender and the law, sex and social class, the effects of gender on religious expression, homosexuality, private versus public life, what ancient doctors knew about sex, how to use magic to get a lover, and deviations from ancient sexual and gender norms.

Classical Studies/Religion 256a History of Christianity 3-3-0

Historical survey of early Christianity: its origin and spread as a Roman religion; developments in its thought, practices, canonical writings, offices and institutions, self-definition in response to internal challenges (heresies) and external critique and hostility; the impact of Constantine; the east-west split.

Classical Studies 260a Rome From Republic to Empire 3-3-0

This course will examine the events leading to the fall of the Roman Republic and the creation of a new imperial system under Augustus and his successors

Classical Studies/Philosophy 270a The Pre-Socratics 3-3-0

As an in depth study of the origins of philosophy in the West with special attention to Anaximander and Heraclitus, Pythagoras and Parmenides, Leucippus and Democritus. *Professor Crooks*

Classical Studies/Philosophy 271a Philosophy of Socrates & Plato 3-3-0

A study of the character and teaching of Socrates as portrayed in Plato's early and middle dialogues. Emphasis will be on theory of education. *Professor Crooks*

Classical Studies/Philosophy 272b Philosophy of Aristotle 3-3-0

A study of selected works of Aristotle with special emphasis on logic, metaphysics, and the concept of substance. *Professor Englebreton*

Classical Studies 280ab Roman Religion 3-3-0

This course examines the religion of the ancient Roman people, following the traditions and changes from the 8th century BCE to the Imperial period. Roman religion was very different from the monotheistic religions with which many of us are familiar today, but it was also significantly different from the mythology of the ancient Greeks, despite the Romans' willingness to absorb and adapt the Greek myths. Topics to be studied in this course will include the Roman concept of divinity, beliefs about the dead, religious and cult ritual, senatorial and imperial control of religion, emperor worship, divination and prophesy, festivals, and Roman responses to the introduction of foreign religions.

Classical Studies 325ab The Classical Tradition 3-3-0

This course examines the influence of Greek and Roman myths, literature and art on western culture from the mediaeval period to the 20th century. Readings (in translation) include Ovid's *Metamorphoses* and Virgil's *Aeneid*.

Prerequisite: a previous Classics course or permission of the instructor

Classical Studies 350ab The Goddess: History, Cult and Myth 3-3-0

What are the names, images and symbols of the goddess? What are her attributes and powers? The goddesses of Greece and Rome and the Virgin Mary have origins which can be traced far back into prehistory. This seminar course examines the history of the goddess cults and the development of images and symbols which represent the goddess from the palaeolithic period to the present day using evidence from archaeology and anthropology, art and literature.

Prerequisite: Classics 250ab or permission of instructor

Classical Studies 360ab Topics in Ancient History 3-3-0

This seminar course will examine selected topics and problems in ancient history and historiography. Sources will be read in translation.

Prerequisites: Classical Studies 209 or 210; Classical Studies 215 or 216; or permission of the instructor.

Classical Studies 365ab and 366ab Topics in Classical Art and Archaeology I & II 3-3-0

These seminar courses will explore topics and problems in Classical Art and Archaeology. Possible topics include: Roman Provincial Art and Archaeology; Greek Vase Painting; Gender and Sexuality in Ancient Art; The Archaeology of Periclean Athens; Aegean Bronze Age Archaeology; Classical Relief Sculpture.

Prerequisites: CLA 120 or 240; CLA 205 or 206 or 207 or 208; or permission of the instructor.

Classical Studies 370a/Philosophy 370a Hellenistic Philosophy 3-3-0

A study of selected Epicurean, Stoic, Skeptical and Neo-Platonic texts with reference especially to development of a philosophy of emotions and the elaboration of a systematic metaphysics.

Prerequisites: Philosophy 271, 272 or permission of the instructor

Professor Crooks

Classical Studies 380ab Topics in Greek and Roman Drama 3-3-0

This seminar course will concentrate on the nature of ancient tragedy and comedy and will include a discussion of Aristotle's *Poetics*. Selected works of Aeschylus, Sophocles, Euripides, Aristophanes, Plautus, Terence, and Seneca will be studied (in translation).

Classical Studies 400a Honours Thesis Preparation 3-3-0

The student will work with faculty advisors and complete a proposal, outline and bibliography and give an oral research progress report.

Classical Studies 401b Honours Thesis 3-3-0

Prerequisite: CLA 400a

Independent Studies

Classical Studies 390a Independent Study 3-0-0

Classical Studies 391b Independent Study 3-0-0

CLASSICAL LANGUAGES

Greek 101 Beginners' Greek 6-3-0

Introducing the ancient Greek language to the beginning student.

Greek 201a Intermediate Greek I 3-3-0

Selections from Greek authors.

Greek 202b Intermediate Greek II 3-3-0

Selections from Greek authors.

Greek 301a Advanced Greek I 3-3-0

Selections from Greek authors.

Greek 302a Advanced Greek II 3-3-0

Selections from Greek authors.

Greek 401a Advanced Greek III 3-3-0

Selections from Greek authors.

Latin 101 Beginners Latin I 3-3-0

Introducing the Latin language for the beginning student. The course covers basic Latin grammar, Latin vocabulary, and English etymology (the Latin origins for English words). And provides sufficient background to translate simplified Latin passages.

Latin 102 Beginners Latin II 3-3-0

Continuing with the Latin language for the beginning student. The course focuses on improving grammatical knowledge, building vocabulary, and creating better facility with Latin translation.

Latin 201a Intermediate Latin I 3-3-0

Selections from Roman authors

Latin 202b Intermediate Latin II 3-3-0

Selections from Roman authors

Latin 301a Advanced Latin I 3-3-0

Selections from Roman authors

Latin 302b Advanced Latin II 3-3-0

Selections from Roman authors

Drama

The department of Drama offers a program balanced between practical theatre and academic study of dramatic literature and theatre history. Our aim is to permit undergraduates to explore the subject as a liberal arts discipline and prepare them for graduate, professional, and conservatory schools.

The department offers Major and Honours programs designed to expose students to all facets of theatre practice and study as well as provide them with the flexibility to orient their program towards a particular field of study: Dramatic Literature and Theatre History, Performance (acting, directing, and playwriting), and Production (technical, stage management, and design).

By the end of their final year, students will have had ample opportunity to work on the department's season of productions in the Studio Theatre and Centennial Theatre (including at least three productions in the Studio, one mainstage production in Centennial during the second semester, the New Plays Festival and the student produced Theatre Activ). A number of students will also have had the opportunity to become Theatre Assistants for Centennial Theatre, receive an honorarium, and be responsible for the proper running of the facilities' operations.

Double Major: Secondary Education and Drama

Program requirements for students pursuing a double major in Secondary Education and Drama may be found under "School of Education" in the Academic Calendar. All questions concerning courses and requirements should be referred to the Chair of the School of Education.

B.A. Major in Drama

A total of **48 credits** are required for the Major in drama. In their first two years, all drama Majors must adhere to the following required courses in their program:

1st Year (12 credits)

Fall: (Drama 101) Introduction to Technical Theatre, (Drama 102) Introduction to Theatre, (Drama 131) Acting I

Winter: (Drama 110) Introduction to Theatre Part II

2nd Year (9 credits)

Fall: (Drama 222) Introduction to Shakespeare

Winter: (Drama 201) Contemporary Canadian Theatre

After the second year the following seminar and production courses are required for all drama Majors (9 credits):

Seminar Courses: *Two* of (Drama 300) Contemporary Theatre Practice, (Drama 301) Contemporary Dramatic Theory, (Drama 302) Classical European Drama, (Drama 315) Medieval Drama, (Drama 322) Topics in Shakespeare, (Drama 319) Film Theory and Criticism

Production Courses: *One* of (Drama 331) Production I, (Drama 332) Production II

The remaining eighteen credits required for the Major in Drama may be taken at anytime during the student's tenure at Bishop's provided that he or she has fulfilled the stated prerequisites for the individual course.

Required Courses (9 credits)

One of (Drama 211) Ritual and Theatre, (Drama 212) Theatre and the State and (Drama 230) Women and Performance

One of (Drama 202) Contemporary American Drama, (Drama 203) Contemporary European Drama

One of (Drama 170) Introduction to Film, (Drama 271) Modern Drama, (Drama 273) Women Dramatists [or a cognate course]

Drama Electives (12 credits)

Four of all other drama courses (except independent studies)

Students must also complete any Divisional Requirements of the Division of Humanities.

B.A. Honours in Drama

Without Thesis (60 credits*)

Courses as required for a Drama major:48 credits

Further courses in Drama

(excluding independent studies):12 credits

With Thesis (66 credits*)

Students must obtain a 75% average, as calculated from the last 60 credits in the Honour discipline (including cognates), in order to graduate with an Honours degree in Drama.

Students wishing to enroll in Drama 450 (Honours Thesis) must have 75% cumulative average when registering in FALL semester, and 75% average on required courses in thesis area of interest.

Courses as required for Drama Major:48 credits

Further courses in Drama

(excluding independent studies):12 credits

Drama 450 Honours Thesis:6 credits

**All Honours students must complete both Drama 331 and Drama 332.*

Students must also complete any Divisional Requirements of the Division of Humanities.

Minor in Drama

A total of 24 credits are required for the minor in Drama:

Required courses:

Drama 101 Introduction to Technical Theatre

Drama 102 Introduction to Theatre

Drama 131 Acting I

Drama 201 Contemporary Canadian Drama

Drama 222 Introduction to Shakespeare

15 credits

Drama electives: Three courses

9 credits

DRAMATIC LITERATURE AND THEATRE HISTORY

These courses are primarily concerned with the study of drama as literature or with the study of theatre history. Some of these courses may be used to satisfy the degree requirements of the Department of English.

All courses are open to non-Drama students.

Drama 102ab Introduction to Theatre: Theatre and Dramatic Literature Before 1800 3-3-0

This course provides students with an introduction to theatre history and to some of the important plays of various historical epochs. One of the focuses of the course is the socially created meaning of theatre, including interaction between audience and stage, the role of the theatre professional in society and the connections between theatre and political and religious institutions. The course will also introduce various theatrical styles. The dramas themselves are interpreted as blueprints for performance, not just as examples of literature.

Drama 110b Introduction to Theatre Part II: Theatre and Dramatic Literature After 1800 3-3-0

This course provides students with an introduction to the theatre history of the modern age and to some of the important plays of this era. The course will also introduce various theatrical styles, such as epic theatre, theatre of the absurd and naturalist theatre. The dramas themselves will be interpreted as blueprints for performance, not just as examples of literature. Among the playwrights included in the course are Henrik Ibsen, Anton Chekhov, Luigi Pirandello, Samuel Beckett, Caryl Churchill and Heiner Müller.

Professor Harries

Drama 201ab Contemporary Canadian Drama 3-3-0

Canadian drama from 1967 on, including the plays of Tremblay, French, Walker, Thompson and others.

Professor G. Rideout

Drama 202ab Contemporary American Drama 3-3-0

American playwrights and theatrical movements of the post-Viet Nam war period. Playwrights include Shepherd, Mamet, Rabe, Wasserstein.

Drama 203ab Contemporary European Drama 3-3-0

European drama since 1960 through examination of works of influential playwrights and dramatic theorists.

Professor Harries

Drama 211ab Ritual and Theatre 3-3-0

There is a persistent and complex relationship between theatre, the sacred and magic. This course explores this relationship through the study of performances/performers and texts from a spectrum of cultures and times. Students will study theories including Aristotle, Victor Turner and Eugenio Barba. Other Texts include Aoi no Uye, A Winter's Tale and Death and The King's Horseman.

Drama 212ab Theatre and the State 3-3-0

The political theatre in both senses of the phrase: what is the relationship between the stage of state and the theatrical stage? What legislation exists to restrict public performances and representations? How have performances in a variety of cultures and historical periods variously challenged and re-instated these cultural models?

Drama 222a Introduction to Shakespeare 3-3-0

Close study of four to six plays from the following: Richard III, Macbeth, A Midsummer Night's Dream, Henry IV pt. 1, Hamlet, Twelfth Night, Othello, The Tempest.

Professor G. Rideout

WOM/DRA 230 Women in Performance 3-3-0

An analysis of the role women have played in the performing arts as practitioners, creators, producers and spectators with emphasis on the modern era and western cultures. The course takes a cultural studies approach to the subject and includes readings by feminist theorists, sociologists and cultural historians.

Drama 271ab Modern Drama 3-3-0

The major European drama and movements of the period from 1875-1910, including the works of Ibsen, Strindberg, Chekhov, among others.

Professor G. Rideout

Drama 273ab Women Dramatists 3-3-0

Discussion and analysis of a number of plays written by women. The plays will be studied in their cultural context and from the perspective of contemporary feminist theory.

Professor Harries

Seminar Courses

The following are seminar and research courses restricted to third- or fourth-year students. Students will be expected to do primary and secondary research work and present such work through class seminars and research papers.

Drama 300ab Contemporary Theatre Practice 3-3-0

Critical discussion, analysis, and research of contemporary theatre practice.

Professor Harries

Drama 301ab Contemporary Dramatic Theory 3-3-0

Critical discussion, analysis, and research of the major critical theorists and writings of the past twenty five years.

Professor Harries

Drama 302ab Classical European Drama 3-3-0

This course covers the important drama and critical works from France, Italy, Germany, and Spain during the seventeenth and eighteenth centuries.

Professor Harries

Drama 315ab Medieval Drama 3-3-0

This course covers the re-emergence and development of drama in Europe from the early to late Middle Ages. The religious drama of England and the Continent will be studied, as well as early examples of secular drama.

Drama 319 Film Criticism & Theory 3-3-0

This course would provide the student with an opportunity to look at the critical analysis of film in greater depth. The topics of the course would include film language, the ontology of film, narratology and reception theory. Christian Metz, Laura Mulvey, Tania Modleski, Tom Gunning and Manthia Diawara would be some of the featured film theorists. The course would also link the study of film theory with the analysis of a selection of films. The course would emphasize the development of various film theories as linked with the practice of film. Students would be evaluated on their ability to comprehend and apply various film theories and on their ability to communicate ideas through both oral presentation and written work.

Prerequisites: DRA170

Professor Harries

Drama 322ab Topics in Shakespeare 3-3-0

Advanced analysis and research on specific plays, as well as on specific critical texts and productions.

Interest Courses and Cognate Courses

Drama 170ab Introduction to Film 3-3-0

This class will consider a number of what are widely regarded as the world's greatest films and the literary works upon which they are based. Major critical stances and acting styles will also be discussed. The films will range in period over the last seventy-five years and in source from many different countries.

Professor Harries

Classical Studies 219a The Greek Tragic Theatre I 3-3-0

Myth and tragedy, origin and development of the Greek theatre; representative tragedies of Aeschylus and Sophocles, in translation.

Classical Studies 220b The Greek Tragic Theatre II 3-3-0

Study of the later works of Sophocles and representative works of Euripides. (In translation)

English 334ab Restoration and Eighteenth-Century Drama 3-3-0

This course covers a wide range of English drama from Etherege through Behn to Sheridan to indicate both the shifting social tastes and the permissiveness of the theatre.

Professor Grogan

Français 283ab Théâtre québécois 3-3-0

Évolution de la production dramatique au Québec depuis Marcel Dubé. Le théâtre de revendication sociale et politique, les happenings et le théâtre expérimental, le théâtre d'improvisation, le genre comique et la recherche contemporaine de nouvelles formes théâtrales. Dramaturges étudiés: Dubé, Tremblay, Meunier, Lepage, Gilles Maheux et Carbone 14, etc.

Professor Levasseur

PERFORMANCE AND PRODUCTION

These courses emphasize the performance and production aspects of theatre. Drama 101 and 131 are required courses for Drama students. Most courses are open to non-Drama students but enrollment may be limited.

Acting

Drama 131ab Acting I 3-3-0

Acting One establishes a physical and vocal warm-up routine, develops public speaking skills, and explores the fundamentals of acting for the stage. Project work is based on individual presentations.

Professor J. Rideout

Drama 132b Acting II 3-3-0

Acting Two continues the focus on voice and movement. Students will begin character work, research, and scene study. Projects are partner based.

Prerequisite: Drama 131

Professor G. Tuck

Drama 233a Acting III 3-3-0

Approaches to text and character. The work is on a project and performance basis, some of which will be for presentation.

Prerequisite: Drama 132 and permission of the Department

Professor J. Rideout

Drama 234b Acting IV 3-3-5

Scene study and collective creation: analysis, rehearsal techniques and final presentation in Studio Theatre.

Prerequisite: Drama 233

Staff

Drama 237ab Theatre Lab 3-3-3

The course will focus intensively on the preparation and training of the physical means of acting. Workshops will concentrate on both voice and body movement exercises.

Prerequisite: Drama 234 and permission of the Department

Professor J. Rideout

Drama 334ab Text and Language 3-3-0

Students will explore the relationship between the written text and the spoken text. Source material will include prose and poetry as well as dramatic dialogue. There is no production attached to this course, but in-class presentations, open to the public, will be given on an informal basis

Prerequisite: Drama 234

Professor Tuck

Drama 439 Scene Study 3-3-0

Students will explore scenes from the great works of the theatre. Texts will generally be chosen from those studied in the dramatic literature courses. Three in house presentations will be given during the term.

Prerequisite: Dra 234 and permission of the instructor

Drama 440 Scene Study II 3-3-0

A senior level acting course that bridges the gap between the study of dramatic literature and full scale production. Each student in the class will have the opportunity to take on leading roles in scenes chosen from two stage classics. Scenes are sequenced so that students gain a greater understanding of the full text in performance. Students will also explore one text on acting theory and engage in related exercises.

Prerequisite: DRA 234 and permission of the instructor

Professor G. Rideout

Directing

We offer six credits in directing. The opportunity to direct a short play is provided by our New Plays and Theatre Activ festivals.

Drama 246a Introduction to Directing 3-3-0

The basic elements of directing a play, including interpretation, analysis, visual presentation, use of space, and rehearsal techniques.

Prerequisite: Drama 101, 102, 131 or permission of the Department

Professor Tuck

Drama 247b Directing Theory and Practice 3-3-0

Study in depth of major directorial problems. Each student directs short scenes.

Prerequisite: Drama 246 and permission of the instructor

Professor Tuck

Playwriting

Six credits of playwriting are offered. Student written plays are produced in New Plays Festival, and Theatre Activ. Enrollment is limited but a few places are open to non-Drama students.

Drama 281a Playwriting I 3-3-0

A course in play appreciation and play structure as well as a practical workshop in the writing of one-act plays. Assignments include text analysis, scene writing, and the creation of a complete short play.

Not open to 1st-year students.

Professor G. Rideout

Drama 282b Playwriting II 3-3-0

Classes take the form of standard playwriting workshop sessions. Each student will write an extended monologue, a series of dramatic sketches, and a one-act play. All work will be read and critiqued by other members of the group.

Prerequisite: Drama 281a or permission of the Department

Professor G. Rideout

Technical Theatre

Drama 101 is open to all students interested in theatre production. Enrollment in subsequent technical courses is limited.

Drama 101a Introduction to Technical Theatre 3-3-3

An introduction to the elements, processes, and systems of the stage environment through lectures and group tutorials.

M. Medland

Drama 250b Intermediate Technical Theatre Stagecraft 3-3-5

This course will examine in more detail several areas of study encountered in Introduction to Technical Theatre. In order to prepare students for more advanced courses, we will concentrate on the use of sound, lighting and scene shop equipment. We will also focus on basic drafting, set construction, scene painting and rigging.

Prerequisite: Drama 101

M. Medland

Drama 251ab Lighting Design 3-3-5

This course covers both the aesthetics and the techniques of stage lighting. In addition to exploring the theory and process, the students will design the lighting for Drama Department student productions.

Prerequisite: Drama 101 and permission of the Department

Staff

Design

Nine credits are offered in set and costume design. Enrollment is limited. These courses are cognate courses for Fine Arts students.

Drama 160a Design for Theatre I 3-3-0

Principles and practice of design for the theatre with special reference to set or costume design.

Staff

Production

These courses involve a major role or function in faculty directed productions in Studio or Centennial Theatres.

Drama 331a Production I: Performance 3-3-5

The course will consist of major involvement in and responsibility for Department production(s) in the areas of acting, stage management or directing. Productions will take place in the Studio Theatre.

Prerequisites: Dra131, Dra132, Dra233, Dra234

Staff

Drama 341a Production I: Technical Production 3-3-5

This course will consist of major involvement in and responsibility for Department production(s) in the areas of design, technical direction and production. Productions will take place in the Studio Theatre.

Prerequisites: Dra101, Dra131, either Dra 250 or Dra 251

Drama 332b Production II: Performance 3-3-5

The course will consist of major involvement in and responsibility for Department production(s) in the areas of acting, stage management or directing. Productions will take

place in Centennial theatre; students will be required to work during Reading Week.

Prerequisite: *Dra131, Dra132, Dra233, Dra234*

Staff

Drama 342b Production II: Technical Production 3-3-5

The course will consist of major involvement in and responsibility for Department production(s) in the areas of design, technical direction and production. Productions will take place in Centennial Theatre; students will be required to work during Reading Week.

Prerequisites: *Dra 101, Dra 131, either Dra 250 or Dra 251*

Thesis

Honours students will undertake a thesis project under the supervision of one or more members of the Department

Drama 450f Honours Thesis 6-1-0 or 6-0-5

Thesis proposals must be submitted before classes begin for the academic year in which the thesis is to be completed.

Students undertaking a thesis in the area of Dramatic Literature and Theatre History will write a thesis-length research paper on a subject approved by the department. Students undertaking a thesis in the area of Production (acting and directing) will write a research paper related to their project and submit all materials related to that project. Before planning a production thesis, students should thoroughly familiarize themselves with the document "Criteria for Acceptance of an Honours Thesis." (available from the chair of the department.)

Staff

Independent Study

The Department offers a variety of independent study options for either Departmentally approved special projects or advanced work in theatre production or drama study. Students may register for a maximum of twelve independent study credits.

Drama 310ab Independent Study: Theatre Research and History 3-1-0

Advanced study of dramatic literature or theatre history.

Prerequisite: *Drama 101, 102, 131, 222 and permission of Department*

Staff

Drama 337a Independent Study: Performance I 3-0-5

Advanced work in major role in faculty directed show.

Prerequisite: *Drama 234, 237, 331*

Staff

Drama 339b Independent Study: Performance II 3-0-5

Advanced work in major role in faculty directed show.

Prerequisite: *Drama 234, 237, 331*

Staff

Drama 350a Independent Study: Theatre Production I 3-0-5

Advanced work in theatre production; major responsibility for production function in Studio Theatre show.

Prerequisite: *Drama 331 and permission of the Department*

Staff

Drama 351b Independent Study: Theatre Production II 3-0-5

Advanced work in theatre production; major responsibility for production function in Studio or Centennial Theatre show.

Prerequisite: *Drama 332 and permission of the Department*

Staff

Drama 352ab Independent Study: Stage Management 3-0-5

Advanced work in stage management; responsibility for stage managing a faculty directed show.

Prerequisite: *Drama 250, 254, 331 or 332 and permission of the Department*

Staff

Drama 363ab Independent Study: Design 3-0-5

Advanced work in set, lighting, or sound design; major responsibility for design of faculty directed show.

Prerequisite: *Drama 251 or 262, 331 or 332 and permission of the Department*

Staff

Drama 365ab Independent Study: Costume Design 3-0-5

Advanced work in costume design; major responsibility for design of faculty directed show.

Prerequisite: *Drama 160 and 331 or 332 and permission of the Department*

Staff

Drama 370ab Independent Study: Special Project 3-0-5

Advanced work on a Departmentally approved special project.

Prerequisite: *Drama 331 or 332 and permission of the Department*

Staff

Drama 380ab Independent Study: Playwriting 3-0-5

Advanced work in playwriting. Interested students must submit a completed first draft two weeks prior to registration.

Prerequisite: *Drama 282*

Staff

The Minor in Film Studies

The Minor provides an introduction to the study of film through the increasingly rich, interdisciplinary approach that now defines this field. Film courses are typically taught in the cinema classroom (Nicolls 4), which is equipped with excellent projection and sound equipment, as well as cinema seating. The Film Minor requires the completion of 24 credits from the following list of courses:

CLA 150	The Ancient World in Film and Television
DRA170	Introduction to Film
DRA172	Canadian Cinema
DRA319	Film Criticism and Theory
ENG 102	Approaches to Media Studies
ENG 106	Approaches to Literary Criticism
ENG 234	Contemporary Critical Theory
ENG 235	History, Theory, and Practice of Cultural Studies
ENG 278	Science Fiction in Literature and Film
ENG 280	Classics of the Post-War Cinema
ENG 281	The Films of Marlon Brando
ENG 282	Film Adaptation
ENG 283	The Documentary Film
ENG 284	Film Noir
ENG 287	Image and Communication
ENG 288	Crime Pays: The Gangster Film Genre
ENG 289	Film History
ENG 291	Film Theory
ENG 292	Studies in National Cinemas: Polish Cinema
ENG 293	Studies in Directors/Actors:
	Mike Leigh and Peter Greenaway
ENG 294	Film Comedy
ENG 295	Jane Austen and Film
ENG 381	The Evolution of the Fairy Tale in Literature and Film
ENG 382	Screenwriting
GER 370	Introduction to German Film
GER 371	East German Cinema:
	From rubble Films to Ostalgic
HIS 332	The Celluloid Republic
ITA 309	Italian Cinema and Society
ITA 310	Italian Cinema and Society II
MUS 102	Music for the Movies
REL 237	Religion and Film
SOC 105	Media and Society I
SOC 241	Cinema
SPA 318	Spanish Cinema
SPA 333	Hispanic Literature and Film

The courses listed above are rotated and may not be offered every year. Students may do any 8 courses from the list to complete the requirements for the Minor. The Directors of the Film Studies Program are Dr. Steven Woodward (English) and Dr. Glen Wickens (English). Students who want further information may contact either Director in Morris House.

English

Within the liberal arts environment of Bishop's University, the Department of English offers a diverse range of courses and programs to help students to develop their critical appreciation of texts of all kinds (literature, film, television, etc.), and to broaden their understanding of culture and its relationship to the individual from historical and theoretical perspectives. Students of English literature develop analytical, research, and communication skills that are well-suited to many careers in today's information economy. Recent graduates have pursued graduate studies and careers in fields as diverse as teaching English, advertising and marketing, film-making, law, politics, publishing, television, education, journalism, and business communications.

The Program

The program has a three-tier structure. Entering students complete a foundation year, which consists of four core courses designed to develop critical approaches to literature, an historical understanding of the evolution of English literatures, and research and writing skills. 200-level courses cover particular historical periods and literary genres as well as literary theory, film, and creative writing. 300-level courses are seminars with an emphasis on student participation.

English Majors (with the exception of students in the Double Major in Secondary English and Education) should normally (in their second semester) choose from one of five Concentrations:

The **Literature Concentration** offers a well-rounded education that challenges the student to read a diversity of British, Canadian, American, Irish, and Postcolonial literatures. Presentation of the literature of early as well as more recent periods enables students to read texts in context and to understand more fully the ways in which people in different circumstances have organized their thoughts and their lives. In consultation with their English faculty advisor, students in the Literature Concentration may elect to enter the English Honours Literature program.

The **Cultural and Media Studies Concentration** is built upon the idea that the full range of cultural products and practices in any particular historical period—whether they be contemporary science-fiction films, the rock 'n' roll music of the 1950's, or bear-baiting in the Elizabethan period—are worthy of the same kind of careful study that has traditionally been reserved for literature. Students taking this option use interdisciplinary approaches to investigate how our ideas of both the world and ourselves are built from a rich interplay of representations in a wide variety of media.

The **Film Studies Concentration** is designed for those students who want to understand film as the storytelling and artistic medium that has arguably had the greatest impact on popular culture in the last hundred years. Film students develop a rich awareness of the historical development of the medium and the theoretical frameworks that critics have used to try to understand how film represents the world and affects audiences. They have the opportunity to study

Hollywood, independent, foreign, and avant-garde films from a wide variety of perspectives, since film courses are offered by many different disciplines at Bishop's (Drama, Music, religion, Modern Languages and Sociology) and even to develop their own skills as screenwriters. In consultation with their English Faculty advisor, students in this concentration may elect to enter the Honours program in Film, media, and Cultural Studies.

The **Popular Narrative Concentration** gives students the opportunity to think about the centrality of storytelling to human culture. By studying narrative in a variety of forms and media, from oral folk stories, through novels, plays, and short stories, to contemporary film, television, graphic novels, and video games, students develop a rich understanding of narrative form, of the limitations and possibilities of different media, and of the social functions and effects of storytelling. In consultation with their English faculty advisor, students in this concentration may elect to enter the Honours program in Literature or in film, Media, and Cultural Studies.

Foundation Year

The three Foundation year courses taken by all English Majors and Honours students are:

English 105, "Approaches to Poetry"; English 112, "English Literary Tradition: The Middle Ages and the Renaissance"; and English 113, "English Literary Tradition: The Eighteenth Century to the Present".

The fourth foundation year course is English 106 for Literature Concentration; English 102 for Film Studies Concentration; English 106 or English 102 for Cultural and Media Studies Concentration and Popular Narrative Concentration.

English Major

1) Literature Concentration

Students in the English Major, Literature Concentration, take at least 48 credits in English, including the Foundation year courses (12 credits), twelve additional credits in English Literature before 1900, including 3 credits in non-dramatic literature before 1660 (i.e. at least one of the following: 310, 311, 314, 315, 316, 320, 321, 325), and 24 credits of English electives.

2) Cultural and Media Studies Concentration

Students in the English Major, Cultural and Media Studies Concentration, take at least 48 credits in English, including the Foundation year courses (12 credits), English 235, "Cultural Studies: History, Theory, Practice" (3 credits), five core electives (15 credits) chosen from 110, 114, 115, 116 [formerly 119], 118, 121, 200 [formerly 301], 201 [formerly 302], 202, 210, 211, 212, 217, 229, 230, 231, 233, 234, 236, 239, 278, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 381, 382, 372, and any 6 additional English courses (18 credits). Students may substitute up to two of the following courses from other disciplines as core electives: Sociology 105, 229, 241, 280, 281, 381; Drama 170, 172, 281, 282, 319; German 370; Religion 237; Spanish 333; and History 332, 371.

3) Film Studies Concentration

Students in the English Major, Film Studies Concentration, take at least 48 credits in English, including the Foundation year courses (12 credits), English 235, 289, 291 and Drama 170 (12 credits), and 8 film courses (24 credits) chosen from English 278, 280, 281, 282,

283, 284, 287, 288, 290, 291, 292, 293, 381, 382. Students may substitute up to two of the following courses from other disciplines as cognates to fulfill the required 21 credits of English film courses: Drama 172, 319, German 370, German 371, History 332, Religion 237, Sociology 241, Spanish 333.

4) Popular Narrative Concentration

Students in the English Major, Popular Narrative Concentration, take at least 48 credits in English, including the Foundation year courses (12 credits), English 236 (3 credits), and 11 electives (33 credits) from: Drama 170, 172, English 212, 217, 218, 219, 220, 235, 278, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 359, 375, 381, 382. Six (6) of the required credits in this category may be chosen from the following cognates: Classics 150, Français 287, 290, German 370, 371, History 332, Italian 309, 310, Music 102, Religion 237, Sociology 241

5) Double Major: Secondary Education and English

Program requirements for students pursuing a double major in Secondary Education and English may be found under “School of Education” in the Academic Calendar. All questions concerning courses and requirements should be referred to the Chair of the School of Education.

Honours in Literature

The Honours in English Literature is designed for students who wish to specialize in the study of English Literature, especially with the goal of continuing to study the subject at the graduate level. Students in this program take at least 60 credits in English, including the Foundation year courses (12 credits), at least three credits from each of the following 10 areas (30 credits) listed below, four elective English courses (12 credits), and either the Honours Thesis (6 credits) ENG 470 or two additional English courses from the 200 or 300 level (6 credits) in its place.

Areas:

- 1) Anglo-Saxon or Middle English: 310, 311, 314, 315, 316
- 2) Sixteenth and Seventeenth Century: 223, 224, 320, 321, 325, DRA 222
- 3) Eighteenth Century: 331, 332, 334
- 4) Romantic: 342, 347, 348
- 5) Victorian: 254, 255, 350, 351
- 6) Twentieth-Century British: 250, 251, 360, 361
- 7) Canadian: 274, 275, 352, 358, 370, 371
- 8) American: 256, 257, 353, 356, 357, 362
- 9) Postcolonial: 228, 229, 230, 231, 375
- 10) Critical Theory: 233, 234, 235, 239, 372

Honours In Film, Media, And Cultural Studies

The Honours in Film, Media, and Cultural Studies is designed for students who wish to specialize in these areas, especially with the goal of continuing to graduate studies.

Students in this program take at least 60 credits in Film, Media, and Cultural Studies, including the Foundation year courses (12 credits), Core Courses (15 credits), five elective courses in Cultural and Media Studies (15 credits) and four elective courses in Film Studies (12 credits), and either the Honours Thesis (6 credits) or two additional courses in Film, Media, or Cultural Studies at the 200 or 300 level (6 credits).

Foundation Year Courses: (12 credits): ENG 102 or 106, 105, 112, 113.

Core Courses: (15 credits): DRA 170, ENG 235, 280, 289, 291.

Elective Courses in Cultural and Media Studies (15 credits): ENG 228*, 236, 278, 285, 286, 287, 290, 352, 358, 359, 372, 375*. Six of the required credits in this category may be chosen from the following cognates: HIS 371, SOC 105, 229, 381, PHIL 136b

Elective Courses in Film Studies (12 credits): ENG 281, 282, 283, 284, 288, 292, 293, 381, 382, DRA 319. Six of the required credits in this category may be chosen from the following cognates: GER 370, HIS 332, ITAL 309, 310, REL 237, SOC 241, SPA 318, 333, CLA 150, MUS 102.

Honours Essay in Film or Cultural and Media Studies (6 credits): ENG 470.

OR

Any two **English courses in Film, Media, or Cultural Studies** at the 200 or 300 level (6 credits).

As per Humanities Division guidelines, students must attain an average of 70%, calculated on the best 60 credits in the program (including cognates) in order to graduate with an Honours degree. Students who wish to change to Honours in their third or fourth year are reminded that the easiest entry to the Honours program is through the Literature Concentration Major.

Cognates

Students in the Honours program and the Major Concentrations in Literature and Education may count Drama courses in English Literature and Education 211 “Introduction to Young Adult Literature” as satisfying English requirements, subject to the approval of the Department. Courses in Classical, French, German, Spanish and Italian literatures, as well as mythology and the Bible may also be considered as cognates. No more than two cognate courses (6 credits) may be counted as part of the English Major or Honours requirements.

Minor

For students in any discipline at Bishop's who, in addition to their major concentration, wish to develop a secondary area of expertise in the one of the fields offered through the English Department, we offer three different minors:

The **Literature Minor** allows students to sample from the many different subject areas offered through the English department. Students must complete any 24 credits of their choice, none of which may be cognate courses.

The **Film Studies Minor** allows students to study film from a variety of different perspectives. Students complete 24 credits in film studies, choosing from courses offered by English and by a wide range of other departments at Bishop's.

Creative Writing and Journalism Minor – This minor is designed to help aspiring writers develop their creative abilities through the practice of writing as a discipline and vocation. Courses focus on the technical aspects of various forms of writing, including poetry, screenwriting, playwriting, journalism, fiction, and creative non-fiction. In addition students must complete a senior seminar with a professional writer. Internships with a newspaper or literary journal will be made available. Students are also expected to participate in the rich writing life at Bishop's, which includes two student drama festivals, the Morris House reading Series, creative writing

competitions, The Mitre, student-run creative writing groups and the Campus newspaper. By the end of their studies, students will have amassed a portfolio of creative works and made business contacts with professional writers.

Courses: 24 credits from the following courses, including at least one senior seminar:

DRA 281	Playwriting I
DRA 282	Playwriting II
ELA 116	Effective Writing
ELA 201	Advanced Composition
ELA 202	Speech
ENG 104	Approaches to Short Fiction
ENG 105	Approaches to Poetry
ENG 200	Creative Writing: Lyric Poetry
ENG 201	Creative Writing: Short Fiction
ENG 203	Creative Writing: Experiments in Prose
ENG 204	Creative Writing: The Long Poem
ENG 282	Film Adaptation
ENG 382	Screenwriting
ENG 285	Journalism
ENG 286	On-Line Journalism
ENG 290	The New Journalism
ENG 461	Senior Seminar: Poetry
ENG 462	Senior Seminar: Fiction
ENG 463	Senior Seminar: Screenwriting
ENG 464	Senior Seminar: Journalism

The senior seminar will be taught each year by a specialist in creative writing or journalism.

Certificate in Cultural and Media Studies

Description and Objectives:

Since the 1980s both Media and Cultural Studies have gained academic standing as separate but closely connected disciplines. The interdisciplinary Certificate in Cultural and Media Studies, designed to appeal to students with a variety of academic interests, provides an opportunity to study how culture is made, consumed, and experienced through such media as literature, print journalism, the internet, photography, and film. The aim of the program is to combine a theoretical understanding of culture with an ability to appreciate media texts as aesthetic forms engaged with broader cultural issues, everything from childhood, gender, and race, to power and national identity.

Admission requirements: *(See Regulations for Certificate Programs)*

Program Structure:

Students must take ten courses for a total of 30 credits, choosing their courses from four areas:

I. One Course in Theory (3 credits)

Drama 319	Film Criticism & Theory
English 106	Approaches to Literary Theory
English 234	Contemporary Literary Theory
English 235	Cultural Studies: History, Theory, Practice
English 239	Feminist Literary Theory
English 291	Film Theory
English 372	Studies in Postmodernism
Philosophy 364	Post-Modernism

II. Three or Four Courses in Film/Photography

(9 or 12 credits)

Drama 170	Introduction to Film
Drama 172	Canadian Cinema
English 280	Classics of the Post-War Cinema
English 281	The Films of Marlon Brando
English 282	Film Adaptation
English 283	The Documentary Film
English 284	Film Noir
English 288	Crime Pays: The Gangster Film Genre
English 290	The New Journalism
English 292	Studies in National Cinemas: Polish Cinema from WWII to the Present
English 293	Studies in Directors/Actors: The Films of Mike Leigh and Peter Greenway
English 381	The Evolution of the Fairy Tale in Literature and Film
FIH 108	History of Photography
Fine Arts 182	Photography I
Fine Arts 296	Photography II
Fine Arts 302	Photography III
German 370	Introduction to German Film
German 371	East German Cinema: from Rubble Films to Ostalgic
History 332	The Celluloid Republic
Sociology 241	Cinema
Religion 237	Religion and Film

III. Two courses in Media/Communication (6 credits)

English 236	Popular Culture
English 287	Image and Communication
History 371	A History of Communications
Sociology 229	Communications: Gender and Culture
Sociology 280	Interpersonal Communication
Sociology 281	Communications Methods

IV. Three or Four Courses in Writing/Literature/Journalism

(9 or 12 credits)

Drama 281	Playwriting I
Drama 282	Playwriting II
English 118	Literature of the Environment
English 121	The Panther's Gaze: Humans and Animals in Literature
English 200	Creative Writing I: Poetry
English 201	Creative Writing II: Prose
English 210	History of Children's Literature
English 211	Cultural Spaces of Childhood: Investigating Children's Popular Culture
English 217	Arthurian Tradition
English 228	Introduction to Post-Colonial Literature
English 230	Studies in Postcolonial Literatures: Africa
English 231	Studies in Postcolonial Literatures: The Caribbean
English 278	Science Fiction
English 285	Journalism
English 375	Colonial Narratives
English 286	On-Line Journalism
English 382	Screenwriting

English 102ab Approaches to Media Studies 3-3-0
Through a close examination of the different forms of contemporary culture people are frequently exposed to and consume - movies, TV sitcoms, internet blogs, pop music, and so on – this course considers how our understandings of reality and our perceptions about society and our identities are shaped by the various media that surround us. Informed by both cultural theory and the history of media, this course offers a series of case studies of media texts with the goal of helping students understand the nature and effects of our contemporary media culture.

Offered every winter
Professor Woodward

English 103 Studies in Comparative Literature: The Novella 3-3-0
This course offers a survey of the novella in European literature with a focus on important themes ranging from foiled love to troubled identity. The course will consider the origins of the novella (Boccaccio, Salernitano etc.) and then examine a variety of works in Italian, German, Danish, French and English literature. Works to be considered include Stevenson's *Jekyll and Hyde*, Mann's *Death in Venice*, Dinesen's *Babette's Feast*, Kafka's *Metamorphosis*, Camus's *The Outsider*, Conrad's *Youth*, Orwell's *Animal Farm*, Calvino's *The Watcher* and other selected stories.

English 104ab Approaches to Short Fiction 3-3-0
This course introduces students to the study of fiction through the analysis of short stories and novellas from various literary traditions and historical periods. Stories will be discussed in terms of such aspects of fiction as plot, character, setting, point of view, voice, discourse, tone, symbol, and theme.

Offered every year

English 105ab Approaches to Poetry 3-3-0
This course introduces students to the study of poetry through the analysis of a variety of short poems from different historical periods. Poems will be discussed in terms of their diction, imagery, figures of speech, rhyme, rhythm, metre, tone, speaker, structure, and form. Some attention will be given to interpreting a poem in the context of the poet's other works, literary tradition, criticism, revisions, history, or culture.

Offered every year

English 106a Approaches to Literary Theory 3-3-0
This course is designed to expand terms of critical thinking and literary analysis through an introduction to contemporary interpretive strategies. We begin by considering what we mean by "literature" and why we study it critically, then open texts to a variety of theoretical perspectives, including semiotics, deconstruction, psychoanalysis, feminism, Marxism and cultural theory.

Offered every winter

English 107ab The Irish Short Story 3-3-0
This course examines Irish short fiction from James Joyce to such contemporary writers as Trevor, McCabe, O'Brien and Healy. The themes investigated include "The Troubles" folklore, gender, religion, social structure, exile, art, and the postmodern.

English 108ab The American Short Story 3-3-0
This course examines the development of the short story form in the United States from its beginnings in the work of Irving, Poe, and Hawthorne, through Fitzgerald and Hemingway, up to such contemporary writers as Oates and Barth. Subjects to be examined include the Gothic tradition, the influence of Puritanism, the African-American experience, gender, and madness.

Offered every year

English 110ab English Writers of Quebec 3-3-0
Selected short stories, novels, plays, and poems of such writers as Hugh MacLennan, Mordecai Richler, Brian Moore, Joyce Marshall, Ralph Gustafson, David Fennario, A.M. Klein, F.R. Scott, and Irving Layton will be studied. Such topics as "English-French Relations," "The Immigrant Experience," "Male-Female Relationships," "Class Conflicts," and "The Jewish Experience" will be examined.

English 111ab Canadian Short Story 3-3-0
This course will examine a wide variety of Canadian short stories, from the late 19th century until the present. The authors studied range from Roberts and Callaghan, to such contemporary writers as Munro, Atwood, Glover, and Vanderhaeghe. The themes to be examined include nature, childhood and family, gender relationships, priorities, old age, the future, and the postmodern.

Offered every year

English 112a English Literary Tradition: The Middle Ages and the Renaissance 3-3-0

An introductory historical survey of major works and genres of British literature from its beginnings to the Restoration. Students will analyze literary works within their historical, social, and cultural contexts. The course emphasizes close reading of individual texts.

Offered every Fall

English 113b English Literary Tradition: The Eighteenth Century to the Present 3-3-0

This course provides an introductory survey of major works and genres of British literature from the Restoration to the end of the Twentieth century. Close reading of individual texts will be informed by analysis of their historical, social, and cultural contexts.

Offered every Winter

English 115ab Women Writers before 1900 3-3-0
A survey of literature in English by women from the Middle Ages until the beginning of the twentieth century in the perspectives of feminist critical theory. The course includes poetry, fiction, and nonfictional prose.

English 118 Literature of the Environment 3-3-0
Since the "discovery" of the New World by Europeans, some of our most important literature has taken as its subject the natural environment in which we live: its importance to our sense of self; how we choose to preserve, use, alter, or destroy it; and the impact these things will have on our lives and future. In this course we will read a range of fiction, poetry, criticism, and literary non-fiction by American and Canadian writers treating the relationship of humans to the natural world.

Only offered in the summer

English 121 The Panther's Gaze: Humans and Animals in Literature 3-3-0

The relationship between humans and animals speaks directly to our understanding of who we are and where we fit into the world. In this course we will read poetry, fiction, and essays that examine how a wide range of writers have explored and defined that relationship: the metaphorical uses to which animals have been put, what of ourselves they are made to reflect back at us, and the very nature of the consciousness that both separates and binds us.

Only offered in the summer

English 122 Introduction to Russian Literature 3-3-0
This course will introduce students to Russian literature (in translation) through a close reading of a selection of novels, poems and short stories.

Only offered in the spring

English 123 Introduction to Indigenous Literature in Canada 3-3-0
This course is an introduction to traditions and innovations in Indigenous literature in Canada through textual analysis and an examination of cultural contexts. Indigenous writing has flourished in recent decades, so the primary focus will be on contemporary literature; however, we will also read selections from earlier texts. We will explore how First Nations writers draw from European, American, and First Nations traditions, and how their works reflect histories of struggle both in style and content. Although written texts will form the core of the course, we may also examine contemporary popular media—especially film—and their representations of the First Nations.

English 200ab (formerly 301) Creative Writing I: Poetry 3-3-0
A workshop seminar for students interested in writing poetry.

English 201ab (formerly 302) Creative Writing II: Prose 3-3-0
A workshop seminar for students interested in writing fiction.

English 202ab History of the English Language 3-3-0
A survey of the transformations of the English language from its beginnings to the present studied in the context of the major social, political, and literary developments in English history. The course includes an introduction to basic linguistic concepts as applied to the study of the English language and an overview of Canadian English.

English 203 Creative Writing: Experiments in Prose 3-3-0
A practical course in writing a variety of fiction and non-fiction prose forms. Work will be edited and critiqued in workshop sessions by peers and the instructor.

English 204 Creative Writing: The Long Poem 3-3-0
A practical course in writing long poems. Work will be edited and critiqued in workshop sessions by peers and the instructor.

English 210ab History of Children's Literature 3-3-0
An historical and critical study of children's literature in English. The course includes an overview of the history of children's literature and introduces students to the critical analysis of a variety of its genres, including nursery rhymes, folk and fairytales, myths and legends, fables, poetry, and "classic" novels. Some of the issues to be discussed may include didacticism, oral and written discourse, appropriation, the development of special literature for children, and the representation of social issues.

Offered every year.

English 212ab Crime Stories: The Great Detectives 3-3-0

An exploration of the development of narratives dealing with crime and punishment from some of its earliest manifestations as pulp fiction or popular reading to sophisticated modern fiction that continues to dominate the best-seller lists. Assigned texts cover both British and North American crime writing in order to demonstrate the evolution of different conventions and themes of the genre. The course will also explore how detective fiction in particular can reveal or even subvert the dominant ideology and culture of its time and place.

English 214 Contemporary Scottish Literature 3-3-0

In this course we will examine selected novels, short stories, poems and plays written in Scotland during the last fifty years. The course will investigate a national literature partly to determine the unique Scots voice in contemporary works. Areas of discussion will include national characteristics, post-unification and recent history and politics, contemporary economic and social conditions, questions of national identity, religious identity, gender identity, and other, less culture-specific or more 'universal' concerns which are common to literary studies.

English 217ab (formerly 117) Arthurian Tradition 3-3-0

A survey of the evolution of the mythic romance of King Arthur and the Knights of the Round Table from its earliest beginnings to modern times. Various works representative of the tradition will be selected from different historical periods and from different media, including film and the visual arts as well as literature.

English 218ab The Gothic Tradition 3-3-0

In this course we shall read representative texts from a wildly popular genre that emerged in the late eighteenth century: the *Gothic*! Beginning with an examination of the medieval connotations of the term "gothic" and its resonances in 18th, 19th, and 20th century aesthetics, our reading will consider the form, readership, and social vision of various types of gothic literature.

Professor Grogan

English 219 Popular Narrative: The Graphic Novel 3-3-0

This course will introduce students to the genre of the Graphic novel and will examine visual rhetoric in literature, history, journalism and popular culture. Possible topics include superhero fantasy, gender stereotypes, sexuality, war, racism and drug abuse.

English 220 Popular Narrative: Fantasy 3-3-0

This course will explore the genre of fantasy in literature and film either through study of several works by a particular individual (Tolkien, Pulman) or a theme present in a selection of works by different authors.

English 223b Elizabethan Shakespeare (1590-1603) 3-3-0

Close study of six plays written and performed in the reign of Elizabeth in relation to the theatrical, social, political, and cultural practices of Elizabethan society and the Elizabethan court.

English 224b Jacobean Shakespeare (1603-1614) 3-3-0

Close study of six plays written and performed in the reign of James I in relation to the theatrical, social, political, and cultural practices of Jacobean society and the Jacobean court.

English 228 Introduction to Post-Colonial Literature 3-3-0

This course is an introduction to post colonial literature and theory. We begin with a discussion of what "post-colonial" means to writers of countries formerly colonized by the British before moving into literatures composed by writers from Africa, Australia, the Caribbean, India, Ireland, and the Pacific.

Professor Malley

English 233ab The History of Literary Theory 3-3-0

A general history of critical theory from Plato to Sontag, examining the origins and development of various trends in criticism and suggesting their inter-relations. Special attention is paid to Plato, Aristotle, Sidney, Dryden, Johnson, Coleridge, Arnold and Marx.

Professor Grogan

English 234ab Contemporary Literary Theory 3-3-0

This course explores diverse topics and debates in contemporary literary criticism. The student will examine the assumptions, intentions and rhetoric of representative critical texts and theoretical schools. Practical application of literary theory to texts is emphasized.

Prerequisite: English 106 or permission of the instructor

Professor Grogan

English 235a Cultural Studies: History, Theory and Practice 3-3-0

This course is an introduction to the historical development and theoretical methodologies of cultural studies as an interdisciplinary field of academic inquiry. We will investigate the processes by which the "literary text" has been extended to and participates within a broader array of cultural products. We will pay careful attention to the transformations of popular culture into highly commercialized mass culture and to the role of new representational technologies that have effected this change (advertising, film, television, internet, music, etc.), as well as their power to produce beliefs and create identities.

Prerequisite: English 106 or English 234 or permission of instructor

Offered every winter

Professor Malley

English 236ab Popular Culture 3-3-0

A very large portion of contemporary culture is mass culture, and mass culture has generally been disparaged by intellectuals from the early 20th century on. More recently, however, critics have begun to celebrate the utopian possibilities of mass culture, the way that individuals actually put mass cultural products to use, converting mass culture (a culture *produced for* the masses) into popular culture (a culture *used by* the people). The tension between these two views of contemporary culture will underpin this course as we examine theories about and practices of popular culture, including advertising, movies, romances and comics, sitcoms and soap operas, stardom and fandom, blogging and online shopping, and pornography.

Professor Woodward

English 238ab Confessions, Memoirs and Life Writing 3-3-0

This course will begin with the explosion in confessions, memoirs and life writing in the 18th century and then move through later works in the 19th and 20th centuries. As we read these works we will consider how fact and fiction merged in presentations of self to challenge the reader, society and literary genres.

Professor Grogan

English 239ab Feminist Literary Theory 3-3-0

An introduction to contemporary feminist theory, including feminist literary history, the economic and social conditions of women writers, the connections between gender and genres, the distinguishing characteristics of feminist and women's reading and writing, and feminist debates about subjectivity.

English 240ab Recent World literature 3-3-0**English 250ab The Modern British Novel: Experiments in Fictional Form 3-3-0**

This course examines the way British novelists of the early twentieth century created new fictional forms to explore the interior life of their characters as well as the problems of their day. Novelists such as Conrad, Ford, Woolf, Forster, Lawrence, Huxley, and Waugh will be studied in relation to a variety of topics, including Imperialism, anarchism, the Suffragette movement, the Great War, psychoanalysis, science and technology, the rise of Fascism, and class conflicts.

Professor Wickens

English 251ab The British Novel After 1930: Darkness Made Visible 3-3-0

This course examines the development of the British novel after the Modernist Period. Novelists such as Greene, Golding, Amis, Murdoch, Fowles, White, and Ishiguro will be studied in relation to a variety of topics, including World War II and the holocaust, the end of Empire, the idea of the hero, the political unconscious, communism, higher education, and gender and identity.

Professor Wickens

English 252 English-Canadian Literature to the First World War 3-3-0

This course explores Canadian literature from the nineteenth century through to the First World War. Analysis focuses on the development of national identity in relation to various cultural, political, social and historical factors.

Professor Morra

English 253 English-Canadian Literature from the First World War to the Present 3-3-0

This course explores Canadian literature from the First World War to the present. Analysis focuses on the aesthetic and cultural developments in English Canada and the impact of international, national, and regional issues.

Professor Morra

English 254ab**(formerly 354)****The Early Victorian Novel and the Condition of England****3-3-0**

This course examines the way novelists such as the Brontë sisters, Thackeray, Dickens, Gaskell and Trollope represent their moment in history as “the best of times, the worst of times.” The focus will be on how the novel emerged as the dominant literary genre and challenged the Victorian faith in progress.

*Professor Wickens***English 255ab****(formerly 355)****The Late Victorian Novel: Beauty and the Beast****3-3-0**

This course examines the way the late Victorian novel responded to the scientific idea of nature while reviving the romance as a fictional form. Novelists such as Eliot, Butler, Collins, Stevenson, Hardy, and Wilde will be studied in relation to a variety of topics: Darwinism and evolution, the Unconscious, Empire, the New Woman, aestheticism, the Dandy, and decadence.

*Professor Wickens***English 256ab****The Early Twentieth-Century American Novel: American Dream/American Nightmare****3-3-0**

The modern American novel to 1955. Such novelists as Fitzgerald, Hemingway, Faulkner, West, Steinbeck, Ellison, and Hurston will be studied. Among the topics to be considered: “The American Dream,” religion, society, black-white relations, and war.

*Professor Morra***English 257ab****The Contemporary American Novel: Sex, Religion, Society****3-3-0**

The contemporary American novel, 1960 to the present. Such novelists as Updike, Morrison, Auster, Pynchon, Nabokov, Roth, and Doctorow will be studied. Among the topics to be considered: religion, the Jewish experience, history and the novel, sexism and the treatment of women, and the “American Dream.”

*Professor Morra***English 274ab****The Early Twentieth-Century Canadian Novel: Garrison and Wilderness****3-3-0**

The Canadian novel to 1969. The novelists to be studied include Ostensio, Grove, Callaghan, Ross, Buckler, MacLennan, and Watson. Among the topics to be considered: nature and the land, society, moral values, the treatment of women, the portrait of the artist.

*Professor Morra***English 275ab****The Contemporary Canadian Novel: “The Myths Are My Reality”****3-3-0**

The contemporary novel, 1970 to the present. The novelists to be studied include Atwood, Laurence, Munro, Davies, Ondaatje, Hodgins, and Shields. Among the topics to be considered: the role of women, the masculine image, history and myth, sainthood, the portrait of the artist.

*Professor Morra***English 278ab****Science Fiction in Literature and Film****3-3-0**

An examination of the futuristic worlds of science fiction as they focus on rather than distract readers from prevalent cultural anxieties and concerns. Students shall consider how science fiction as a symbolist genre variously constructs and deconstructs hegemonic cultural practices within our present digital, networked, information age. Taking an interdisciplinary approach, students shall consider both the history and form of science fiction and some of the theoretical and cultural issues endemic to the genre.

*Professor Malley***English 280ab****Classics of the Post-War Cinema****3-3-0**

This course offers a close study of seven film classics, including their literary sources and/or screenplays, from the late 1940's to the end of the twentieth century. Students will become familiar with all aspects of the filmmaking process, from cinematography, acting styles, lighting, and set design, to musical cues and editing.

*Professor Wickens***English 281ab****The Films of Marlon Brando****3-3-0**

This course examines the cinematic career of the actor generally considered to be the greatest in the history of American film. Attention will be given to the Stanislavski tradition and Method school of acting, to the political choices Brando made from film to film, to his changing star text, and to the creative influence of the actor as auteur. Films and screenplays to be studied include: *A Streetcar Named Desire*, *Viva Zapata!*, *On the Waterfront*, *One-Eyed Jacks*, *Burn!*, *The Godfather*, and *Last Tango in Paris*.

*Professor Wickens***English 282ab****Film Adaptation****3-3-0**

This course compares the novel and film as narrative arts while examining the dialogue

that ensues when film interprets literature. The theory and practice of film adaptation will be studied in relation to some famous novels, both “highbrow” and “popular”, and their cinematic versions.

*Professor Wickens***English 283****The Documentary Film****3-3-0**

This course will trace the historical evolution and impact of English language documentary film and video. From John Grierson's original definition of “the creative treatment of actuality,” documentary has evolved from propaganda to direct cinema/cinéma vérité to docudrama. Two important questions will be addressed: Do documentary film and video's reductive forms of interpreting events truly illuminate our media saturated world? How can studying documentary better help us understand a society dominated by media giants?

*Offered in the spring***English 284****Film Noir****3-3-0**

Traditionally, film noir is considered more a feeling than a genre, featuring moods of cynicism, darkness and despair. This course will examine noir's downbeat atmosphere, graphic violence, and complex antiheroes, tracing the genre's development from its origins in World War II's pessimism to its contemporary reflections of social corruption and hypocrisy. Classic and neo-noir films will be viewed and analyzed.

*Offered in the spring***English 285ab****Journalism****3-3-0**

This course teaches the basic requirements of reporting and news writing: interviewing, clear writing, critical thinking, accuracy, story organization, news judgment, and ethical considerations. Students will practice writing news and study some examples of good journalism.

English 286ab**On-Line Journalism****3-3-0**

A hands-on, real-life approach to accurate reporting of local news stories through an on-line newspaper created and maintained by course participants with active supervision/involvement by the instructor/managing editor. The on-line paper will be a modified collaborative news website: students will generate the news but all copy must be funneled through the managing editor to maintain accuracy and quality of content.

English 287**Image and Communication****3-3-0**

This course will offer an overview of the history of photography, its evolution into art, the invention of moving pictures and the development of propaganda and advertising. Themes will include a study of how images serve as cultural signs, how gender orients ‘the gaze’ in cinema and how images are fundamental to a shared world of entertainment, news and consumerism.

*Offered in the spring***English 288****Crime Pays: The Gangster Film Genre****3-3-0**

This course examines the development of the gangster film from the classical cycle of the early 1930s to the present day Sopranos. Films to be studied may include *Little Caesar*, *The Public Enemy*, *Scarface (Hawks)*, *High Sierra*, *Bonnie and Clyde*, *Godfather II*, *The French Connection*, *Goodfellas*, and *Shanghai Triad*.

*Professor Wickens***English 289****Film History****3-3-0**

This course offers a survey of the technological innovations and aesthetic movements that shaped film production and direction from the 1890's to the outbreak of World War II. Topics to be studied include: early experiments in photography, the beginnings of narrative cinema, German Expressionism, French Poetic Realism, forms of comedy, Soviet Silent Cinema and the theory of montage, the Hollywood studio and star systems, and the introduction of sound and colour to motion pictures. A wide range of films are studied to acquaint students with the contours of film history to 1939.

*Professor Woodward***English 290****The New Journalism****3-3-0**

This class examines a major movement in nonfiction literature that had its genesis in the United States during the 1960s: the “New Journalism,” which brought narrative elements and the writer's subjectivity to traditional news reportage. Students will analyze pioneering works of the genre, including Truman Capote's nonfiction novel *In Cold Blood*, Tom Wolfe's *The Electric Kool-Aid Acid Test* and Hunter S. Thompson's *Hell's Angels*, and will continue by exploring the so-called “Gonzo” journalism of the 1972 U.S. presidential election (with examples from the films *Where the Buffalo Roam* and *Fear and Loathing in Las Vegas*), Dominick Dunne's reporting on the O.J. Simpson criminal trial, and more recent internet manifestations of the genre. Assignments will include textual analysis and writing subjective news stories.

English 291 Film Theory 3-3-0
This course introduces students to some of the more influential theoretical perspectives that have shaped the viewer's understanding of film over the past century. The course will begin with the realist-formalist debates of classical theory and proceed to examine the impact of literary criticism, semiotics, feminism, psychoanalysis, and Marxism on contemporary film theory. Films from different genres and national cinemas are used to illustrate the various approaches to interpreting and evaluating cinema.

Professor Woodward

**English 292 Studies in National Cinemas:
Polish Cinema from WWII to the Present 3-3-0**

From 1945 to 1989, Polish filmmakers worked within a communist-controlled industry, and they were bound either to reflect communist ideology in the subjects and aesthetics of their films or find surreptitious means of eluding communist censorship and control. In this course, we will examine key films by such filmmakers as Andrzej Munk, Andrzej Wajda, Roman Polanski, Krzysztof Zanussi, Agnieszka Holland, and Krzysztof Kieslowski and consider how these filmmakers not only evaded communist control but produced powerful social and political critiques, extending the language of cinema in the process.

Professor Woodward

**English 293 Studies in Directors/Actors:
The Films of Mike Leigh and Peter Greenaway 3-3-0**

Mike Leigh and Peter Greenaway are two of the most prominent contemporary British filmmakers. Both born during WWII, they share a commitment to exposing the repression (class- and gender-based) and suppressed violence of supposedly civilized life. But while Greenaway's films are built on tight formal structures and sumptuous visual imagery, Leigh's films are often viewed as if they are formless and unaesthetic happenings unfolding before the camera. In this course, we will examine five films by each director and consider how the working methods of each contribute to the politics and aesthetics of their work.

Professor Woodward

English 295b Jane Austen and Film 3-3-0

This course will examine Jane Austen both as a British novelist and also as an iconic figure taken up by the film industry. The class will study four of her novels, their publication histories and recent phenomenal success as films. Where possible a selection of the various film adaptations of each novel will be studied to allow the student to gain a better appreciation of Austen as a writer and consider how the various novels and film adaptations reflect the ideologies of their own period.

Professor Grogan

English 310ab Anglo-Saxon Studies I: The Heroic Age 3-3-0

An interdisciplinary study of the history, culture, language and literature of Anglo-Saxon England. The course will focus on the reading and interpretation of primary sources in Old English that represent the heroic character of the Germanic tribal society that became a unified English nation. Sources will include a selection of historical and literary texts from the eighth to the eleventh century.

**English 311ab Anglo-Saxon Studies II:
Conversion and Transformation 3-3-0**

An interdisciplinary study of the history, culture, language and literature of Anglo-Saxon England. The course will focus on the reading and interpretation of primary sources in Old English that describe the coming of Christianity to Anglo-Saxon England and the subsequent transformation of an oral, pagan culture to a literate Christian society. Sources will include a selection of historical and literary works from the eighth to the eleventh century.

English 314ab Chaucer: The Canterbury Tales 3-3-0

Travel the pilgrimage road with the master storyteller of medieval England, Geoffrey Chaucer. Meet some of the most famous characters of English literature and read tales that range from high romance and tragedy to low comedy and burlesque. The focus of the course will be on reading *The Canterbury Tales* in Middle English within their particular literary, social and historical context.

**English 315ab Romance and Dream Vision in Medieval England:
The Sacred and the Profane 3-3-0**

Romance and dream vision represent two of the most significant genres of medieval literature. Both are well represented by major texts in Middle English whose subjects range from sophisticated philosophical and religious themes to social comedy and pure escapism—often all within the same work. The focus of the course will be on reading primary texts in Middle English within their particular literary, social and historical context.

English 316ab Medieval Comedy and Satire: The Festive Voice 3-3-0

According to medieval writers, comedy could be any story that ends happily, a story about ordinary or common people, or simply any text suitable for entertainment at a party. Not surprisingly, a wide range of medieval literature can be included under these terms: parody, burlesque, beast fable, fabliau, political and social satire, and sheer nonsense. What medieval comedy does present is a world upside down where the silent and marginalised can speak, and where political and social boundaries are constantly crossed. This course offers a banquet of some of the great English comic writing of the Middle Ages to be enjoyed in its original language, and within its historical and cultural context.

**English 320ab Sixteenth-Century Poetry and Prose:
Exploration and Discovery 3-3-0**

After nearly a century of civil war, England under the Tudors experienced a period of relative peace and stability and an opportunity for cultural catching up. The writers of the time confronted a broad range of ideas and phenomena associated with the European renaissance and the intensified exploration by Europeans of the world beyond their continent. They needed to think about their relationships to classical civilization, to the peoples and places described by travelers and explorers, and to the other within their midst as mediated by the powerful influence of Petrarch on the ideas and practices associated with the erotic. The course will examine some of the ways in which writers of the sixteenth century both responded to these relationships and shaped them.

**English 321ab Seventeenth-Century Poetry and Prose:
Civil War and Revolution 3-3-0**

The seventeenth century was a period of intense political, social, and religious conflict that finally resulted in the outbreak of civil war. The course will examine some of the ways in which the writers of the period divided themselves according to the large lines of the conflict between parliament and the crown, their contributions to the parties to which they adhered, and their reflections on the divisions that tore their society apart.

English 325ab Milton: From Pastoral to Epic and Tragedy 3-3-0

The course will follow the classically based trajectory of John Milton's career from his apprenticeship in the low genre of pastoral in *Lycidas* and *Comus* to the exalted genres of epic in *Paradise Lost* and *Paradise Regained* and tragedy in *Samson Agonistes*.

**English 331ab Eighteenth-Century Poetry:
Restoration, Revolution and Order 3-3-0**

This course examines how poets from the Restoration in 1660 through to the late 1700s initially reflected social turmoil and unrest but increasingly created a sense of controlled order through the "Augustan" style. Particular attention will be paid to Dryden, Rochester, Finch, Pope, Montagu, Swift and Cowper.

Professor Grogan

English 332ab 18th-Century Literary Journeys 3-3-0

In this course we shall examine a diverse range of 18th-century texts that have one thing in common: each uses travel as a plot-triggering device. We will begin the course with a reflection on what travel is, what forms it takes, and why we do it. We shall then consider why travel is such a pervasive narrative form in post-Restoration Britain. Among issues to be considered are contemporary debates on human nature and civilization, as well as relationships between scientific, historical, commercial, and colonial discourses in an age of vigorous exploration.

Professor Grogan

**English 334ab Restoration and Eighteenth-Century Drama:
Sex, Politics and Intrigue 3-3-0**

This course covers a wide range of English drama from Etherege through Behn to Sheridan to indicate both the shifting social tastes and the permissiveness of the theatre.

Professor Grogan

English 342ab Revolution and Romanticism 3-3-0

In this course we will examine the prose writings of the British Romantics from 1789-1832. Readings will explore a variety of topics generated by the French Revolution and the ensuing period of intense political anxiety and intellectual activity. Works by Paine, Burke, Wollstonecraft and Godwin will be examined.

Professor Grogan

English 347ab Early Romantic Poetry: Revolutionary Experiments 3-3-0

Poetry of the early Romantic Period (1780-1800) by poets such as Blake, Smith, Robinson, Wordsworth, Coleridge, Williams and Burns. Particular attention will be paid to the social and political role of the poet, poetic form, imagination, inspiration, "masculine" and "feminine" romanticism.

Professor Grogan

- English 348ab Later Romantic Poetry: The Egotistical Sublime 3-3-0**
Poetry of the later Romantic period (1800-1832) by poets such as Byron, Baillie, Keats, Shelley, Hemans and Clare. Particular attention will be paid to the social and political role of the poet, poetic form, imagination and inspiration.
Professor Grogan
- English 350ab Early Victorian Poetry and Prose: Faith in an Age of Doubt 3-3-0**
This course surveys the way early Victorian poets and prose writers responded to their age as a crisis of faith. The poetry of Tennyson and Browning will be studied in relation to selections from the prose of Macaulay, Mill, Carlyle, Newman, and Ruskin.
Professor Wickens
- English 351ab Late Victorian Poetry and Prose: Against the Grain 3-3-0**
This course examines the way late Victorian poets and prose writers overturned many of the cherished assumptions of High Victorianism. The poetry of Arnold, Fitzgerald, the Rossetti, Meredith, and Hardy will be studied in relation to prose writings of Pater, Huxley, Morris, and Wilde
Professor Wickens
- English 352 Canadian Literature and Theories of Globalization 3-3-0**
This course will examine the representation of various aspects of globalization in Canadian literature. Analysis may focus on immigration, diaspora formation, experiences of alienation and racism, multiculturalism, evolving conceptualizations of Canadian citizenship, and other related themes. Authors may include Camilla Gibb, Wayson Choy, Nino Ricci, and Michael Ondaatje.
Professor Morra
- English 353 American Literature and the "New Woman" 3-3-0**
The first National Women's Rights Convention, in Worcester, Massachusetts, was held in 1850: it signaled the emergent figure in popular culture referred to as the "New Woman." Focusing on American literature, this course will examine the "New Woman" in asymmetrical or imbalanced relationships, and analyze how this figure alters notions of reason, convention, race, masculinity, femininity, and family relationships.
Professor Morra
- English 356ab Early Nineteenth-Century American Literature: In God We Trust? 3-3-0**
This course examines the work of American writers from 1820 to 1860, including Irving, Hawthorne, Poe, Melville, Douglass, Emerson, Thoreau, and Davis. Topics to be investigated include madness, Puritanism, slavery, the situation of women, society, the nature of the universe, the natural world, and expediency versus absolutism.
Professor Morra
- English 357ab Late Nineteenth-Century American Literature: "America Was Promises" 3-3-0**
This course examines the work of American writers from 1860 to 1900, including Crane, Twain, James, Chopin, Whitman, Dickinson, and others. Topics to be investigated include the Civil War, Naturalism, race, Native peoples, the American identity, the situation of women, and insanity.
Professor Morra
- English 358 Approaches to Indigenous Literary Culture in Canada 3-3-0**
This course will examine Indigenous literature in Canada. It will begin by looking at its progression from oral to contemporary written literary forms, and how the latter developed in response to colonial contact. Authors may include Thomas King, Lenore Keeshig Tobias, Eden Robinson, Armand Ruffo, Warren Cariou, and Tomson Highway.
Professor Morra
- English 359 Approaches to Canadian Culture (Canadian Studies) 3-3-0**
This course will examine a range of aesthetic representations (Canadian "wilderness," historical events, First Nations cultural imagery, and so forth) that are conceived of as indigenous to Canada. These representations, as they have evolved from the late nineteenth to the early twentieth century, will include the cultural production of Canadian writers, painter, film directors, and musicians in order to demonstrate the (often conflicting) social and political ideological structures from which these artists operated.
Professor Morra
- English 360ab (formerly 250) Modern British Poetry: Making It New 3-3-0**
This course examines how Hardy, Yeats, Owen, Sassoon, and Eliot tried to modernize poetry in the early years of the twentieth century. Their poetry will be studied in relation to such topics as the First World War, Imagism, Symbolism, Georgian poetry, literary tradition, pessimism, and the decline of religion.
Professor Wickens

- English 361ab (formerly 251) British Poetry After 1930: Explorations in Identity 3-3-0**
This course surveys the post-modern development of British poetry. Auden, Lewis, Spender, Macneice, Thomas, Larkin, and Hughes will be studied in relation to such topics as the Depression, Communism, Futurism, neo-Romanticism, the Second World War, post-colonialism, and violence.
Professor Wickens
- English 372 Studies in Postmodernism 3-3-0**
In this course we will explore topics, debates, and aesthetic manifestations of what Jean-François Lyotard terms "the postmodern condition." We shall consider the philosophical and political origins and meanings of postmodernism, how we use the term to articulate contemporary cultural conditions and concerns, and how these efforts constitute a "poetics" of postmodernism suggestive of indeterminacy, fragmentation, de-canonization, and hybridization. Our reading includes foundational texts on postmodernist theory and case studies drawn from postmodernist literature.
Prerequisites: Any one of English 106, 233, 234, 235, 239 or permission of the instructor Professor Malley
- English 375 Colonial Narratives 3-3-0**
In this course we will examine the narration of colonial experiences in various world and historical contexts. Our reading will range from the nineteenth century imperial fictions of Rudyard Kipling and Henry Rider Haggard to a selection of postcolonial texts dealing with the cultural impact and legacy of British imperialism in the Caribbean, India, Kenya, Nigeria and Ireland. Our discussions will be informed by readings in postcolonial theory.
Professor Malley
- English 381 The Evolution of the Fairy Tale in Literature and Film 3-3-0**
This course will investigate how one kind of text, the fairy tale, a genre appropriated from the oral culture of peasants, has been modified and reworked to suit a wide range of other cultural contexts. By investigating both the production and reception of fairy tales - within the literary culture of the court of Louis XIV and of 19th century England, in the folklore movements of 19th century Germany and Britain, in children's culture from the late 19th century to the present, throughout American movie culture in the 20th century, and within late-20th century feminist circles - we will see how this genre so focused on the image of metamorphosis has itself been transformed and used in radically liberating or deeply repressive ways.
Professor Woodward
- English 382 Screenwriting 3-3-0**
This course introduces students to the art and techniques of screenwriting for a variety of contexts and genres, such as feature films and television drama. Through critical analysis of existing screenplays and the shows and films that derive from them, students will gain an understanding of the narrative and stylistic conventions of screenwriting and will apply their understanding in the development of their own creative projects.
Professor Woodward
- English 460ab Senior Seminar 3-3-0**
Advanced studies on a special topic.
- English 461 Senior Seminar: Poetry 3-3-0**
An advanced writing course taught by a professional writer.
Note: Enrollment may be restricted to senior students enrolled in the English Minor in Creative Writing and Journalism. Normally only one Senior Seminar is offered each year.
- English 462 Senior Seminar: Fiction 3-3-0**
An advanced writing course taught by a professional writer.
Note: Enrollment may be restricted to senior students enrolled in the English Minor in Creative Writing and Journalism. Normally only one Senior Seminar is offered each year.
- English 463 Senior Seminar: Screenwriting 3-3-0**
An advanced writing course taught by a professional writer.
Note: Enrollment may be restricted to senior students enrolled in the English Minor in Creative Writing and Journalism. Normally only one Senior Seminar is offered each year.
- English 464 Senior Seminar: Journalism 3-3-0**
An advanced writing course taught by a professional writer.
Note: Enrollment may be restricted to senior students enrolled in the English Minor in Creative Writing and Journalism. Normally only one Senior Seminar is offered each year.
- English 470 Honours Essay 6-1-0**
An individual project on an area or author selected by the student in consultation with the department.

Études françaises et québécoises

The Département d'études françaises et québécoises offers courses in three areas: French language, French literature and civilization, and Québec literature and civilization. The objectives of these courses are to allow students to speak, read and write French correctly and with ease and to become familiar with the broad lines of French and Québec literatures, while studying certain works or periods more thoroughly.

Le Département d'études françaises et québécoises offre des cours dans les domaines suivants : langue française, littérature et civilisation françaises, littérature et civilisation québécoises. Les objectifs de ces cours sont de permettre aux étudiants de parler, de lire et d'écrire le français correctement et avec aisance et de connaître les grandes lignes des littératures française et québécoise, tout en étudiant certaines œuvres ou certaines époques en détail.

Language courses French 131, 132, 133, 134, 151, 152, 201 and 202, which are designed for non-francophone students, must be taken in sequence, and students who have not successfully completed French 202 (or a suitable equivalent at another institution) should not attempt courses with the designation *Français*. Students who take a course with the designation *Français* (language, literature or civilization) should have completed French 202 or the equivalent and be fluent in French. Students who need to improve their basic French language skills are encouraged to seek additional exposure to French-language milieux.

Les cours de langue French 131, 132, 133, 134, 151, 152, 201 et 202, qui sont conçus pour les étudiants non francophones, doivent être suivis l'un après l'autre et les étudiants qui n'ont pas fait le cours French 202 (ou un cours équivalent dans une autre institution) ne devraient pas s'inscrire dans un cours portant la désignation *Français*. Les cours portant la désignation *Français* (langue, littérature ou civilisation) s'adressent aux étudiants qui ont fait le cours French 202 ou l'équivalent et qui s'expriment avec aisance en français. Les étudiants qui ont besoin d'améliorer leurs habiletés langagières de base en français devraient rechercher des occasions de fréquenter des milieux de langue française.

French Learning Program in Mini-Immersion (FLPMI) 6 credits/semester Programme d'apprentissage du français en mini-immersion (PAFMI) 6 crédits/semestre (The beginners level will not be offered in the Fall 2009.)

The courses, taught by experienced teachers in the area of French as a second language teaching, are offered to groups of 21 to 25 students. The teachers are accompanied in their tasks by teaching assistants responsible for answering right away all questions asked by students. The courses are offered during a full day, once a week, for the normal duration of the semester. As a complement, various compulsory activities, conducted in French, will be offered to the students under the supervision of the teacher and the teaching assistants. Students will have 6 contact hours a week with a teacher, in a teaching environment, for a 12-week period. Regular evaluations will take place, and a final examination will be held during the University official examination period. Cultural and leisure outings will also be organized several times per semester in order to optimize the contact between the FLPMI students and the French-speaking reality of Québec. The students participating in the FLPMI will pay, when they register, the regular fees as well as the costs linked to the cultural and leisure activities. These costs will also cover all the course materials

which they will receive at the beginning of the semester. Students will not be asked any additional financial participation by the University during the semester. After the deadline for fees refund for dropped courses, no partial or complete reimbursement for the activities will be permitted. For any information, please communicate with the chair of the Études françaises et québécoises Department.

Les cours, assurés par des professeurs expérimentés dans le domaine de l'enseignement du français langue seconde, sont proposés à des groupes de 21 à 25 étudiants. Les professeurs sont accompagnés dans leur tâche par des assistants pédagogiques chargés de répondre sur-le-champ à toute interrogation des étudiants. Ces cours se déroulent sur une journée entière, une fois par semaine, pendant la durée normale du semestre. En complément, diverses activités pédagogiques obligatoires, conduites en français, seront offertes aux étudiants sous la supervision du professeur et de ses assistants pédagogiques. L'étudiant est assuré de 6 heures de contact par semaine avec un professeur, dans un cadre d'enseignement, et ce, pour une durée de 12 semaines. Des évaluations régulières auront cours, et un examen final sera tenu durant la période prévue par l'Université à cette fin. Des sorties culturelles et de loisirs seront également organisées plusieurs fois par semestre afin d'optimiser le contact entre les étudiants du PAFMI et la réalité francophone du Québec. Les étudiants participant au PAFMI devront acquitter, lors de leur inscription, les frais de scolarité réguliers ainsi que les frais reliés aux activités culturelles et de loisirs. Ces frais couvriront également la totalité des coûts du matériel pédagogique qui leur sera remis en début de semestre. Aucune participation financière supplémentaire ne sera demandée par l'Université à l'étudiant. Passé la date officielle d'abandon des cours, aucun remboursement, complet ou partiel, ne sera permis. Pour tout renseignement, veuillez communiquer avec le directeur du Département d'études françaises et québécoises.

Minor in French as a Second Language Mineure en français langue seconde

This program of 24 credits is intended for students with very little or no French who come to Bishop's in a four-year program. Students must take one course in each of their 8 semesters in order to complete the program.

Ce programme de 24 crédits est conçu pour les étudiants ayant très peu ou n'ayant pas de français qui viennent à Bishop's dans un programme de quatre ans. Les étudiants doivent suivre un cours dans chacun de leurs 8 semestres de façon à compléter le programme.

French 131, 132, 133, 134 (or 137 and 138), 135, 151, 152, 201, 202

Minor in French Language Studies Mineure en études de la langue française

This program of 24 credits is intended for students with high-school French or who have studied French for at least five years. Students in a four-year program will normally take one of the required courses per semester while students in a three-year program will have to take two in semesters 5 and 6.

French 151, 152, 201, 202 plus four three-credit courses with the designation Français

Ce programme de 24 crédits est conçu pour les étudiants qui ont pris le français au cours de leurs études secondaires ou qui ont étudié le français durant au moins cinq ans. Les étudiants dans un programme de quatre ans devront normalement suivre un des cours requis par semestre et ceux dans un programme de trois ans devront

en suivre deux dans les semestres 5 et 6.

French 151, 152, 201, 202 plus quatre cours de trois crédits ayant la désignation Français

N.B. *The Minor in French as a Second Language and the Minor in French Language Studies are mutually exclusive in a student's program.*

N.B. *La Mineure en français langue seconde et la Mineure en études de la langue française sont incompatibles dans le programme d'un étudiant.*

Minor in French Mineure en français

This program, which is intended for students who have completed French 202 or the equivalent, is made up of any 8 courses (24 credits) having the designation Français.

Ce programme, qui est conçu pour les étudiants qui ont fait le cours French 202 ou son équivalent, se compose de 8 cours (24 crédits) portant la désignation Français.

Major in French Language Studies Majeure en études de la langue française

This program, which is intended for students who did not do their studies in French language schools, is made up of 16 courses (48 credits) having the designation FRE (introductory French language courses) or FRA (literature and advanced language courses).

Ce programme, qui s'adresse aux étudiants qui n'ont pas fait leurs études dans des écoles de langue française, se compose de 16 cours (48 crédits) portant la désignation FRE (cours d'introduction à la langue française) ou FRA (cours de littérature et de langue avancés).

Major in French Majeure en français

This program, which is intended for students who have completed French 202 or the equivalent, is made up of 16 courses (48 credits) with the designation Français.

Ce programme, qui s'adresse aux étudiants ayant complété le cours French 202 ou son équivalent, se compose de 16 cours (48 crédits) portant la désignation Français.

Double Major: Education and French

Program requirements for students pursuing a double major in Secondary Education and French may be found under "School of Education" in the Academic Calendar. All questions concerning courses and requirements should be referred to the Chair of the School of Education.

Honours in French Honours en français

This program is made up of 20 courses (60 credits) having the designation Français. Two of those 20 courses can be cognates approved by the Département. A minimum of 4 courses (12 credits) from each of the three sections is required. Because all the literature courses and some language courses are taught on a two- or three-year rotation, this program should be chosen only in consultation with the Département and should not normally be chosen before a student has completed at least 36 of the required credits. Some courses may have to be taken at another university.

Ce programme se compose de 20 cours (60 crédits) ayant la

désignation Français. Deux de ces cours peuvent être des cours connexes approuvés par le Département. Un minimum de 4 cours (12 crédits) provenant de chacune des trois sections est requis. Puisque tous les cours de littérature et quelques-uns des cours de langue sont offerts en rotation sur deux ou trois ans, ce programme ne devrait être choisi qu'en consultation avec le Département et il ne devrait normalement pas être choisi avant qu'un étudiant ait complété au moins 36 des crédits requis. Certains cours peuvent devoir être suivis dans une autre université.

Appropriate courses in Latin, Greek, Modern Languages, Sociology, History, etc. may be counted as cognates. See the Chairperson.

Des cours appropriés en latin, grec, langues modernes, sociologie, histoire, etc. peuvent être comptés comme cours connexes. Voir le directeur du Département.

Students must attain an average of 70%, calculated on the best 60 credits in the Honours discipline (including cognates), in order to graduate with an Honours degree in any Division of Humanities Program.

Les étudiants doivent avoir conservé une moyenne de 70 %, calculée sur les 60 meilleurs crédits de leur discipline Honours (y compris les cours connexes), pour obtenir un baccalauréat faisant mention d'un programme Honours dans toutes les disciplines de la Division des humanités.

Major in Modern Languages with a French component Majeure en langues modernes avec une composante française

The Major in Modern Languages offered by the Department of Modern Languages requires the completion of 60 credits in two languages (30 credits in each language) and French may be chosen as one of the two languages at the intermediate or advanced level:

La majeure en langues modernes offerte par le Département des langues modernes comporte 60 crédits dans deux langues (30 crédits dans chacune) et le français peut être choisi comme une des deux langues au niveau intermédiaire ou avancé:

French Language Studies (intermediate level) Études de la langue française (niveau intermédiaire)

This option is intended for students who did not do their studies in French language schools. Students can include any FRE (French) (with the exception of French 131, French 132 and French 137) or FRA (Français) courses in their 30 required credits.

Cette option s'adresse aux étudiants qui n'ont pas fait leurs études dans des écoles de langue française. Les étudiants peuvent compter les cours portant la désignation FRE (French) (à l'exception des cours French 131, French 132 et French 137) ou FRA (Français) dans les 30 crédits requis.

French and Quebec Studies (advanced level) Études françaises et québécoises (niveau avancé)

This option is intended for students who have completed French 202 or the equivalent or who have studied in French language schools. Students can include only courses with the designation FRA (Français) in their 30 required credits.

Cette option s'adresse aux étudiants qui ont fait le cours French 202 ou l'équivalent ou qui ont fait leurs études dans des écoles de langue française. Les étudiants ne peuvent compter que les cours portant la désignation FRA (Français) dans les 30 crédits requis.

Course description (FRE) / Description des cours (FRE)

Language courses for non-francophone students Cours de langue pour étudiants non francophones

French 131, 132, 133, 134, 135, 137, 138, 151, 152, 201, 202

French 131ab French I 3-3-1
Introduction to basic structures and vocabulary of the French language in order to participate in and understand simple conversations. Emphasis is put on pronunciation, exchange of personal information, expression using the present tense and the immediate future, knowledge and description of surroundings, and the various question forms. For students who have no or almost no previous knowledge of French.

Prerequisite: permission of the Department

Antirequisite: previous Français 131

French 132ab French II 3-3-1
Continuation of French I: expansion and acquisition of new grammatical structures to relate simple past events and describe various types of activities, express opinions, preferences and dislikes. Basic role playing is used (interacting at the restaurant or in stores, giving directions, etc.) to help expand vocabulary.

Prerequisite: French 131 or previous Français 131 (or permission of Department)

Antirequisite: previous Français 132

French 133ab French III 3-3-1
Expansion of the grammatical structures taught in French II. Description of past events is refined and is tied to the present and the future. Introduction to the conditional and the subjunctive. Expression focussing on daily activities, personal relationships, emotions, will and wishes, hypotheses, etc. Aural comprehension is developed through the use of audio and audiovisual material.

Prerequisite: French 132 or Français 132 or French 137 (or permission of Department)

Antirequisite: French 138 or previous Français 133

Professeur Carle

French 134ab French IV 3-3-0
Intermediate level course designed to help students improve their oral and written skills. The following verb tenses are studied: impératif, passé composé, imparfait, futur simple, conditionnel présent and subjonctif présent. Other main grammar points studied are the agreement of adjectives and the use of personal pronouns complement.

Prerequisite: French 133 or Français 133 (or permission of the Department)

Antirequisite: French 138 or previous Français 134

Professeur Carle

French 135ab Conversation and Aural Comprehension 3-3-0
This course is designed to improve the quality of spoken French and enhance the vocabulary through a series of interactive activities (aural comprehension, pronunciation, language audio exercises, improvisation, role playing, interviews, etc.). With a focus on current events and related topics using francophone newspapers, magazines, and the electronic media.

Prerequisite: French 133 or French 137 or previous Français 133 (or permission of Department)

Professeur Levasseur

French 137ab French I-II 6-6-2
Intensive course
This course covers the contents of French 131ab and French 132ab in one semester.

Prerequisite: permission of Department

Antirequisite: French 131 or French 132

French 138ab French III-IV 6-6-2
Intensive course
This course covers the contents of French 133ab and French 134ab in one semester.

Prerequisite: French 137 or French 132 (or permission of Department)

Antirequisite: French 133 or French 134

French 151ab Langue et grammaire françaises I 3-3-0
Révision et approfondissement de la grammaire de base. Entraînement à l'expression écrite (compositions). Études de textes courts: lecture, extension du vocabulaire, compréhension écrite et orale. Ce cours s'adresse aux étudiants qui n'ont pas fait leurs études préuniversitaires dans des écoles françaises.

Prerequisite: French 134 or previous Français 134 (or college French and permission of the Department)

Antirequisite: previous Français 151

Professeur Boutin

French 152ab Langue et grammaire françaises II 3-3-0
Suite du cours French 151ab. Ce cours s'adresse aux étudiants qui n'ont pas fait leurs études préuniversitaires dans des écoles françaises.

Prerequisite: French 151 or previous Français 151 (or permission of Department)

Antirequisite: previous Français 152

Professeur Boutin

French 201a Grammaire avancée I 3-3-0
Révision systématique de la grammaire française et approfondissement des principales difficultés qu'elle présente. Ce cours s'adresse aux étudiants non francophones qui souhaitent perfectionner leur français écrit.

Prerequisite: French 134 or French 138 or French 151 or French 152 (or permission of Department)

Antirequisite: previous Français 201

Professeur Boutin

French 202b Grammaire avancée II 3-3-0
Suite du cours French 201a.

Prerequisite: French 201 or French 152 (or permission of Department)

Antirequisite: previous Français 202

Professeur Boutin

Course description (FRA) / Description des cours (FRA)

Cours de langue française ayant la désignation Français / French language courses having the designation Français

Français 203, 204, 205, 207, 244, 245, 246, 247, 301, 302

Cours de civilisation ou de littérature françaises ayant la désignation Français / Civilisation or French literature courses having the designation Français

Français 161, 163, 164, 206, 261, 262, 263, 264, 265, 266, 361, 362, 363, 364, 365

Cours de civilisation ou de littérature québécoises ayant la désignation Français / Civilisation or Quebec literature courses having the designation Français

Français 181, 182, 186, 187, 270, 284, 285, 287, 288, 290, 381, 382, 384

Français 161ab La France contemporaine 3-3-0
Panorama de la vie politique, économique et culturelle. Évolution des valeurs individuelles et collectives. Aperçu de la francophonie.

Français 163ab Explication de textes I 3-3-0
Ce cours propose l'acquisition et le développement de méthodes de travail pour les études littéraires et cherche à analyser certains mécanismes de la production littéraire. Les lectures nombreuses de textes variés faites en commun permettront de maîtriser la formulation du résumé, du plan, de l'introduction, etc., et les problèmes de présentation matérielle des travaux écrits (notes, références, bibliographie, etc.). Nombreux exercices en classe.

Professeur Carle

Français 164ab Explication de textes II 3-3-0
Renforcement des acquis du cours Français 163a. Développement de l'expression écrite. Initiation à la critique, par l'étude des différentes méthodes de critique littéraire, traditionnelles et contemporaines.

Prerequisite: Français 163 (or permission of instructor)

Professeur Carle

Français 181ab Histoire socio-culturelle du Québec I 3-3-0
Examen des différents aspects de la société québécoise, depuis la Nouvelle-France jusqu'à la Seconde Guerre mondiale. Les découvreurs et l'Amérique, les tentatives de colonisation, les relations avec les autochtones, la Conquête, la Rébellion des Patriotes, la lutte entre le libéralisme et l'ultramontanisme, les influences américaines, les querelles linguistiques, les deux guerres et les crises de conscription, la crise économique de 1929, etc. Lecture de textes d'époque.

Antirequisite: previous Français 127a

Professeur Levasseur

Français 182ab Histoire socio-culturelle du Québec II 3-3-0
Transformations dans la société québécoise depuis la Seconde Guerre mondiale. Le conservatisme de l'époque de Duplessis, la Révolution tranquille et le rejet des valeurs traditionnelles, la contreculture, la montée des idées de gauche et du nationalisme, le mouvement féministe, les problèmes linguistiques, le concept de société distincte, la mondialisation, etc. Lecture de textes représentatifs.
Professeur Levasseur

Français 186ab L'attrait des sciences et de la ville 3-3-0
La présence et l'utilisation des sciences dans les imaginaires populaire et savant, avec comme toile de fond la personification de la ville, du XIXe siècle à nos jours. Les grandes découvertes scientifiques, les plaisirs et les dangers de la ville, la Seconde Guerre mondiale, la littérature existentielle, etc.
Antirequisite: previous Français 184
Professeur Levasseur

Français 187ab Introduction au théâtre québécois 3-3-0
Observation et analyse de l'évolution culturelle du Québec par la fenêtre de son théâtre. La censure du clergé à ses premières heures. L'émergence du vaudeville français et du burlesque américain comme expressions du populaire, en concurrence à la poussée du cinéma muet. Les Compagnons de Saint-Laurent et leur rôle dans la préparation des premiers acteurs de la télévision. Les mouvements de contreculture et les créations collectives durant la Révolution tranquille. L'intérêt renouvelé pour la comédie dans les années 1980. Le théâtre de l'ailleurs et de la fragmentation, le décloisonnement des genres, le Cirque du Soleil, etc.
Antirequisite: previous Français 185 or Français 283
Professeur Levasseur

Français 203a Initiation à la langue des affaires 3-3-0
Vocabulaire propre à chacune des grandes divisions de l'administration, lecture d'articles de revues et de journaux choisis principalement en fonction du vocabulaire, révision de points de grammaire pertinents, courtes présentations en classe par les étudiants sur des sujets reliés au monde des affaires, rédaction de compositions et de condensés de textes.
Prerequisite: French 152 or French 201 or French 202 or any course having the designation Français (or permission of Department)
Professeur Boutin

Français 204b La communication écrite et verbale en milieu de travail 3-3-0
Théorie et modèles de la communication en milieu de travail. Techniques de rédaction, de présentation d'exposés et d'interaction verbale. Supports à la communication. Rédaction de lettres, de notes de service, de communiqués de presse, de procès-verbaux, etc.
Prerequisite: French 152 or French 201 or French 202 or any course having the designation Français (or permission of Department)
Professeur Boutin

Français 205ab La phrase complexe 3-3-0
Étude des diverses propositions subordonnées. Exercices d'analyse, de rédaction et de traduction (anglais-français) visant à étendre l'éventail des ressources d'expression.
Prerequisite: French 152 or French 201 or French 202 or any course having the designation Français (or permission of Department)

Français 206ab Histoire de la langue française 3-3-0
Étude de la langue française, de l'ancien français au français moderne, incluant les tendances contemporaines de la diversité francophone. Approche chronologique et géolinguistique appuyée sur des textes significatifs, des documents sonores et audiovisuels.
Professeur Carle

Français 207ab Mise à jour grammaticale 3-3-0
Ce cours, conçu à l'intention de ceux et celles qui se destinent à l'enseignement du français, servira aussi à quiconque veut accroître ses connaissances grammaticales et améliorer sa capacité à rédiger correctement.
Prerequisite: French 152 or French 201 or French 202 or any course having the designation Français (or permission of Department)
Professeur Boutin

Français 244ab Exercices pratiques de français écrit 3-3-0
Travaux pratiques portant sur les principales difficultés grammaticales et orthographiques du français ainsi que sur la construction des phrases.
Prerequisite: French 152 or French 201 or French 202 or any course having the designation Français (or permission of Department)
Professeur Levasseur

Français 245a Initiation à la traduction I 3-3-0
Exercices de traduction visant à perfectionner l'usage idiomatique du français au niveau du vocabulaire et de la syntaxe.
Prerequisite: French 152 or French 201 or French 202 or any course having the designation Français (or permission of Department)
Professeur Boutin

Français 246b Initiation à la traduction II 3-3-0
Suite du cours Français 245a.
Prerequisite: French 152 or French 201 or French 202 or any course having the designation Français (or permission of Department)
Professeur Boutin

Français 247ab Rédaction et communication 3-3-0
Étude des théories et pratiques de l'écriture, avec une attention particulière portée aux théories de la communication, aux niveaux de langue, à l'argumentation, aux figures de style et à la présentation des données. Seront employés (créés et analysés) des textes littéraires, publicitaires, de mass médias et autres.
Prerequisite: French 152 or French 201 or French 202 or any course having the designation Français (or permission of Department)
Professeur Levasseur

Français 261ab Le Théâtre du XVIIe au XIXe siècle 3-3-0
Lecture et commentaire de pièces significatives du théâtre du XVIIe, XVIIIe et XIXe siècles. L'étude des divers genres (comédie, tragédie, drame, vaudeville) et des diverses esthétiques (classique, romantique) permettra de se familiariser avec les grandes tendances traditionnelles du théâtre.
Professeur Carle

Français 262ab Moralistes et penseurs 3-3-0
Lecture et commentaire de textes du XVIe (Montaigne) et XVIIe siècles (La Rochefoucauld, Pascal, La Bruyère, La Fontaine) ayant la nature humaine pour objet.
Professeur Carle

Français 263ab De la féminité au féminisme : les femmes de lettres 3-3-0
Survол historique de la production littéraire féminine, de Louise Labbé à Benoîte Groult.
Professeur Carle

Français 264ab Les époques de la critique 3-3-0
Survол historique des discours critiques et des théories esthétiques entourant certaines œuvres significatives de la littérature française, de la Renaissance à nos jours.
Professeur Carle

Français 265ab Aspects du romantisme 3-3-0
Étude du mouvement romantique à travers les œuvres les plus représentatives des auteurs les plus connus : Chateaubriand, Hugo, Lamartine, Sand, Sainte-Beuve, Vigny et les membres du Petit Cénacle.
Professeur Carle

Français 266ab La littérature interrogée, XXe siècle 3-3-0
Lecture et commentaire d'œuvres littéraires – poésie, roman, théâtre, essai – qui annoncent les transformations majeures que connaîtra la littérature durant le XXe siècle.
Professeur Carle

Français 270ab Littératures migrantes et de la francophonie 3-3-0
La littérature et le cinéma comme miroirs de l'expression des particularités culturelles nationales. Observation de la complexité historique des différences culturelles rencontrées dans une variété d'aires géographiques reliées à la francophonie, à l'exception de l'Europe (Québec, Antilles, Maghreb, Afrique subsaharienne, autres pays arabes avec influences françaises, etc.). Examen et analyse de la perception de l'Autre dans le Québec contemporain : la vision par le Québec de l'immigrant et l'écrivain québécois réfléchissant sur l'Extérieur et sur l'Étranger. Après entrevues, des stages linguistiques avec des familles immigrantes peuvent faire partie de l'évaluation.
Antirequisite: previous Français 289
Professeur Levasseur

Français 284ab Littérature et condition des femmes au Québec 3-3-0
Étude du traitement littéraire des luttes de pouvoir entre l'homme et la femme à travers ses diverses modalités d'expression : l'Amour (sa présence, son absence, son contraire), les rapports conjugaux, le statut social et politique des sexes, l'homosexualité, l'androgynie, etc. Seront lues et analysées des œuvres d'écrivains et d'écrivaines du Québec des XIXe et XXe siècles.
Professeur Levasseur

Français 285ab Roman québécois contemporain 3-3-0

La maturité du roman québécois, des années 70 à nos jours. Le retour à l'histoire, l'émergence des sagas historiques et sociales, l'essor du roman policier et de science-fiction, l'engouement pour la littérature de jeunesse. Observation des liens avec le cinéma et la télévision.

Antirequisite: previous Français 282

Professeur Levasseur

Français 287ab De l'aventure et de l'histoire 3-3-0

La culture, la littérature et l'histoire du Québec par le biais des romans d'aventures, des romans historiques et des récits de voyage publiés au XIXe siècle. L'attrait des États-Unis et du libéralisme, les grands événements historiques (guerre de 1812, rébellion des Patriotes, guerre de Sécession américaine, la Confédération, etc.), les voyages en Europe et en Orient ainsi que des récits de voyage publiés au/ sur le XIXe siècle.

Antirequisite: previous Français 183

Professeur Levasseur

Français 288ab Le Québec culturel de la Révolution tranquille 3-3-0

Exploration des bouleversements culturels ayant touché le Québec des années 1960-1970. Le repli sur soi des années précédentes; la montée de la génération du baby-boom; l'émergence du joual et d'une nouvelle littérature; la contre-culture, les mouvements de gauche; la chanson et l'humour comme expressions d'une identité.

Antirequisite: previous Français 215

Professeur Levasseur

Français 290ab Censure, religion, campagne et coureurs de bois 3-3-0

Les liens historiques difficiles entre l'appel des grands espaces et le devoir de la vie sur la terre. Examen de romans et de poésies du terroir des XIXe et XXe siècles, de romans de coureurs de bois et de romans censurés par le clergé catholique. Observation de l'évolution de ces liens dans les radiromans et téléromans du XXe siècle.

Antirequisite: previous Français 183

Professeur Levasseur

Français 301a Stylistique et traduction I 3-3-0

Étude comparative des ressources d'expression caractéristiques du français et de l'anglais. Initiation aux problèmes et aux techniques de la traduction. Analyse des principaux contrastes sur le plan du lexique et de la syntaxe. Correction des anglicismes et des calques. Cours axé sur la pratique : travaux dirigés en classe et nombreux exercices. Niveau exigé : aisance dans l'expression écrite et orale à la fois en anglais et en français.

Prerequisite: Français 245 and Français 246 (or permission of Department)

Professeur Boutin

Français 302b Stylistique et traduction II 3-3-0

Suite du cours Français 301a. Analyse des difficultés particulières à la traduction entre le français et l'anglais. Études des principaux procédés de la traduction. Sensibilisation aux divers types de textes, aux figures de rhétorique, aux allusions culturelles. Travaux dirigés et nombreux exercices.

Prerequisite: Français 301 (or permission of Department)

Professeur Boutin

Français 361ab 100 ans de poésie 3-3-0

Étude de l'évolution de la poésie de la révolution romantique à la révolution surréaliste. La lecture et les commentaires de cette production qui s'échelonne sur un siècle conduiront à mieux apprécier l'originalité réelle de chaque période poétique.

Professeur Carle

Français 362ab Le nouveau roman 3-3-0

Étude à partir de textes significatifs des caractéristiques du nouveau roman. Textes théoriques : A. Robbe-Grillet, Pour un nouveau roman; N. Sarraute, l'Ère du soupçon. Textes de fiction : A. Robbe-Grillet : La Jalousie, Le Voyeur; M. Butor : L'Emploi du temps, La Modification.

Professeur Carle

Français 363ab Écriture et Pouvoir politique 3-3-0

Étude à partir de certains textes significatifs du principe de la contestation du Pouvoir ou de son apologie. Auteurs étudiés : La Fontaine, Molière, Restif, Sade et un choix d'auteurs de la période romantique (Hugo, Lamartine, Vigny, Gautier, Nerval).

Professeur Carle

Français 364ab Les philosophes romanciers 3-3-0

Au XVIIIe siècle, Rousseau, Diderot ou Voltaire étaient non seulement des philosophes mais également des romanciers ou des conteurs. Étude des textes de fiction (romans et contes) qui servirent à la diffusion des idées philosophiques.

Professeur Carle

Français 365ab La grande époque du roman 3-3-0

Étude de l'âge d'or du roman à travers les grands romanciers et leurs œuvres : Balzac, Flaubert, Hugo, Stendhal.

Professeur Carle

Français 381ab Littérature orale au Québec 3-3-0

Évolution du concept de l'oralité au Québec en relation avec les transformations socio-culturelles. Études de la littérature, des mythes et des sources philosophiques des contes et légendes, de la chanson et du phénomène de l'humour.

Professeur Levasseur

Français 382ab Littérature acadienne 3-3-0

Étude de l'évolution de l'Acadie, de sa langue et de sa littérature depuis sa fondation (1605) jusqu'à nos jours. Lecture et analyse d'œuvres des grands poètes, dramaturges, romanciers et essayistes (Maillet, Leblanc, Savoie, Chiasson, Léger, Le Bouthillier, etc.).

Professeur Levasseur

Français 384ab Poésie et chanson du Québec 3-3-0

Étude des courants les plus intéressants de la poésie et de la chanson québécoises du XIXe siècle à nos jours : la chanson satirique et politique, le phénomène Nelligan, les régionalistes, les premiers chansonniers populaires (la Bolduc, Ovide Légaré), les poètes de la Solitude et de l'Hexagone, le phénomène des boîtes à chansons avec les Leclerc, Vigneault, Charlebois, etc.

Professeur Levasseur

Fine Arts

The Fine Arts program offers a major and minor providing an undergraduate formation in both art history and studio practice within the context of a liberal arts education. The degree earned is a liberal arts degree, Bachelor of Arts (B.A.), a more versatile diploma, not a Bachelor of Fine Arts (B.F.A.). Students obtain a foundation for possible careers in teaching, the practice of art, museum curatorship, arts administration or art librarianship, among others. An honours degree with a concentration in either studio art or art history is an option for students with superior academic records wishing to complete additional Fine Arts credits. An honours degree is recommended for those students wishing to apply to programs of graduate study.

Studio work at Bishop's normally begins with the entry level courses, introductions to practice in two- and three-dimensional media, combined with the application of critical concepts to visual experience and art-making. Students may take courses in drawing, painting, sculpture, printmaking, photography. Each of these areas is taught by an instructor who is a dedicated teacher and active practitioner in his or her field. Expanded purpose built studio facilities in the Fine Arts Building provide adequate space for medium size classes offering individual attention to students' work and a group atmosphere that is congenial and supportive. Regarding entrance to all studio courses, priority is given to Fine Arts students.

Offerings in art history include the survey of Western art, and courses in depth on periods in European art from the Renaissance through the 20th century as well as courses in Canadian art. Students' conceptual horizons in studying art history are developed through courses on the theory and criticism of art, the methods and concepts of art history, and feminist approaches to the discipline. Attention to art in its institutional context is a common thread in art historical instruction at Bishop's.

A major resource for the Department of Fine Arts, as well as for the larger community, is the Foreman Art Gallery. The Gallery mounts exhibitions of art historical interest and shows representative of new directions in contemporary art. This spacious facility is located adjacent to the Centennial Theatre.

The Program

The major in Fine Arts has three components: art history (FIH), studio (FIS), and comparative arts (FIN). It requires a minimum of 48 departmental or cognate credits, with a minimum of 21 credits in art history including FIH 102: Survey of Western Art II: Renaissance to Modern, FIH 220: Twentieth-Century Art to the 1960s, FIH 221: Art since the 1960s, two 200 level art history courses (of which only one may be a cross-listed course), and two 300 level art history courses, 21 credits in studio art, as well 6 credits from the comparative arts component of the program. Students normally advance to 200 and 300 level courses according to their year in the program. Fine Arts Studio 140, 160, 170, 181 and 182 and 190 are prerequisites to further studio work for Fine Arts majors and minors, who must achieve a grade of at least 65% in one or more of these courses to be admitted to more advanced studio courses. These are also the courses to which students from other programs who may wish to study studio art are directed.

The minor in Fine Arts requires a minimum of 24 departmental or cognate credits, with 12 credits in art history including FIH 102: Survey of Western Art II: Renaissance to Modern, FIH 220: Twentieth-Century Art to the 1960s, FIH 221: Art since the 1960s, plus one additional art history course, and 12 credits in studio.

Art History and Theory Concentration in Liberal Arts

Program requirements:

36 credits in art history including FIH 102: Survey of Western Art II: Renaissance to Modern, FIH 220: Twentieth-Century Art to the 1960s, FIH 221: Art since the 1960s, and at least two 300 level courses. Of the seven (7) remaining art history courses two may be cross-listed courses.

Double Major: Secondary Education and Fine Arts

Program requirements for students pursuing a double major in Secondary Education and Fine Arts may be found under "School of Education" in the Academic Calendar. All questions concerning courses and requirements should be referred to the Chair of the School of Education.

All majors and honours students in Fine Arts must satisfy the Humanities Divisional requirement outlined at the beginning of the Humanities section of the calendar.

Honours Program

The Honours Programs in Fine Arts require the completion of 60 credits in Fine Arts. Eligibility for admission to the Honours degree is determined by the following criteria: an average of at least 65% in all courses attempted in the student's first and second 30-credit program years and an overall average no lower than 70% in courses within the program. Academic eligibility of students aspiring to the Honours Program is established in the course of their second year.

Two areas of concentration are recognized for the Honours degree with the following distribution in each:

Honours Art History

42 credits in art history including the 21 credit requirements in art history for the Major in Fine Arts and 21 additional credits in art history. 18 credits in studio art are required. Of the total credits in art

history, 9 credits must be completed in 300 level courses and no more than 9 credits may be cross-listed, none of which can be double counted for students enrolled in more than one program. A student may be granted permission to take one comparative arts course instead of a cross-listed one. As per the Humanities Division guidelines, students enrolled in the Honours Program must successfully complete 60 credits in Fine Arts courses in which they must maintain an overall average of at least 70% to graduate with an Honours degree.

Studio Honours

A portfolio to be submitted by the end of the student's third full-time semester in the program is necessary for admission to this program. Course requirements consist of 36 credits in studio and 24 credits in art history. Within the studio requirement, 9 credits must be completed in 300 level courses with at least:

6 credits in Drawing (FIS, formerly FIN160ab, 260ab, 261ab)

3 credits in Printmaking or Photography (FIS, formerly FIN 190ab, 291ab, 182ab, 296ab, 302ab)

9 credits in Sculpture and Painting, with at least 3 in each medium (FIS, formerly FIN 170ab, 281ab, 271ab, 181ab, 372ab, 382ab)

Requirements for Advancement in Studio Program

Normally students must achieve a grade of at least 65% in one or more Foundation level (100 level) studio courses before they may be admitted to more advanced studio courses. A student who believes he or she may have grounds to request exemption from one of the 100 level studio courses is required to present a portfolio of work to one of the studio faculty before registration in order that a determination may be made.

Independent Study

Students who have completed 60 credits in the program and who have completed the course work in a given area may submit a formal proposal to the department outlining a project to be undertaken independently in consultation with the instructor. The Independent Study option is available only to Fine Arts students who have been in the Bishop's program for at least a year and who are currently pursuing other courses in the department on a full-time or part-time basis. Departmental approval is contingent on acceptance of the proposed project or course of research by the supervising instructor. Projects will be received no later than the Friday following registration.

HISTORY OF ART

Fine Arts History 101a	Survey of Western Art I: Prehistory to Medieval	3-3-0
Introduction to concepts and methods of art history. Survey of the visual arts from the Paleolithic Era through the Middle Ages.		
Fine Arts History 102b	Survey of Western Art II: Renaissance to Modern	3-3-0
This course surveys Western art Production from the Early Renaissance to the present. Key works of painting, sculpture, graphic arts and architecture are studied in the contexts of their production and use. Students are introduced to methods of perceptual, historical and critical analysis currently used in the discipline.		

Fine Arts History 110ab**Classical Studies 110ab The Art and Archaeology of Ancient Egypt 3-3-0**

A survey of the art and architecture of ancient Egypt from the Pyramids to the Valley of the Kings and an introduction to the archaeological discoveries made in Egypt in the Twentieth century.

Fine Arts History 205a**Classical Studies 205a Greek Art and Architecture 3-3-0**

Western art and architecture begin in ancient Greece. From miniature vases to monumental statues of ivory and gold, we will explore the creations of potters and painters, sculptors and architects and study Greek art from the Bronze age to the time of Alexander the Great.

Fine Arts History 206ab**Classical Studies 206ab Early Christian and Byzantine Art 3-3-0**

This course examines the ways in which the Christians adapted elements from Greek, Roman and Near Eastern art and architecture to their religious beliefs and requirements and also studies the development of this new Christian art in the Byzantine Empire. Major topics include: Catacomb art, early Christian and Byzantine architecture, mosaic and painting, manuscript illuminations, textiles and the minor arts.

Fine Arts History 207ab**Classical Studies 207ab Art and Architecture of the Etruscans and the Roman Republic 3-3-0**

In this course we will begin with a study of the colourful wall paintings of Etruscan tombs where men and women drink and dance and panthers and lions guard the dead. Once rulers of Rome, the Etruscans and their art declined as the Roman Republic grew powerful. We will examine how the Romans developed an innovative art and architecture which expressed the values of their society.

Fine Arts History 208ab**Classical Studies 208ab Art and Architecture of Imperial Rome 3-3-0**

A survey of Roman art and architecture from the first century A.D. to the fourth century A.D. The course examines the use of art as propaganda and the tension between tradition and innovation in Roman Art.

Fine Arts History 211a Medieval Art and Architecture 3-3-0

An overview of European art and architecture from the fall of the Roman Empire to the reestablishment of urban culture in the 12th and 13th centuries. During this period of migration, pilgrimage and almost chronic warfare, Christian, Muslim, Jewish and pagan communities found themselves in new relations of proximity and exchange. This course studies the visual artifacts of these communities – including manuscript illumination, calligraphy, ceramics, jewelry, textiles, stained glass, monumental sculpture and architecture – and explores what they tell us about the values of their audiences and the circumstances of their production and use. (Students who have credit in FIN 114 may not take this course for credit)

Prerequisite: Fine Arts History 101a or 102b, formerly FIN 101a or 102b

Fine Arts History 215 Renaissance and Mannerism 3-3-0

This course studies religious and secular European art from the so-called rebirth of Greco-Roman Antiquity in the early 15th century to the High Renaissance and Mannerism of the late 16th century. Art and its issues will be addressed from both contextual and critical approaches in art history. Particular attention will be given to the Italian Renaissance in Florence, Rome and Venice, the Northern Renaissance in the Netherlands, Flanders, France, Germany and England, and the Renaissance in Spain. (Students who have credit in FIN 116, FIN 201, FIN211 or FIN 212 may not take this course for credit)

Prerequisite: Fine Arts History 102

Fine Arts History 216 Baroque and Rococo Art 3-3-0

A study of 17th and 18th century art in Europe within a changing cultural context that resulted not only in the extravagant and spectacular art of the Counter-Reformation and absolute monarchies, but also in a more restrained, classical strain of art under private patronage from a large affluent middle class. The effects of world exploration, the advancement of scientific knowledge, and political turbulence will be considered. Particular attention will be given to Italy, Spain, Flanders, the Dutch Republic, France and England. (Students who have credit in FIN 214 may not take this course for credit)

Prerequisite: Fine Arts History 102

Fine Arts History 217 Neoclassicism and Romanticism 3-3-0

This course explores major developments in painting, sculpture and interior decoration from the mid-18th to the mid-19th centuries. It introduces students to the concepts and institutions of modern European art and traces the functions of art within the tumultuous social and political circumstances of its production and display. (Students who have credit in FIN 227 may not take this course for credit)

Prerequisite: Fine Arts History 102

Fine Arts History 218 Realism to Fin-de-siècle 3-3-0

This course surveys art production in Europe from the mid-19th century, when the avant-garde emerged as a politically-engaged, publicly-oriented force, until the fin-de-siècle, when it retreated to a private, subjective realm. Works by key Realist, Impressionist, Post-Impressionist, Symbolist and Art Nouveau artists and designers are studied within the broad social, cultural and political circumstances of their production and use. (Students who have credit in FIN 231 may not take this course for credit)

Prerequisite: Fine Arts History 102

Fine Arts History 220 Twentieth-Century Art to the Sixties 3-3-0

Western art from Expressionism to Abstract Expressionism. Major European movements (such as Cubism, Futurism, Dada, Surrealism, Constructivism) and American ones (from the Ashcan School to the New York School) will be studied. Topics include the paradigms of figuration and abstraction, innovations such as collage and photomontage, the contribution of literary movements, appropriations from non-Western cultures, and the influences of Freudian and Jungian theories, socialist ideas, the Russian Revolution, totalitarian regimes, and two World Wars on artists. (Students who have credit in FIN 104 may not take this course for credit)

Prerequisite: Fine Arts History 102

Fine Arts History 221 Art Since the 1960s 3-3-0

The international art scene from the 1960s to today. Topics include Pop art, French Nouveau Réalisme, Minimal art, Italian Arte Povera, Conceptual Art and the International Fluxus movement from the sixties; the pluralistic seventies – when performance, video, Body Art, Land art, installation and Feminist art seemed to proclaim the ‘death’ of painting; the drastic return of painting by the eighties (with Neo Expressionism, Bad Painting, Graffiti art, etc.), and some of the challenges linked to the globalization of art to this day. (Students who have credit in FIN 105 may not take this course for credit)

Prerequisite: Fine Arts History 102

Fine Arts History 225 Canadian Art 3-3-0

Art and architecture in Canada from its indigenous background to the present. (Students who have credit in FIN 240 or FIH240 may not take this course for credit)

Fine Arts History 230 History and Theories of Photography 3-3-0

An exploration of the changing nature of photographic thinking and practice from early 19th century experiments to present day digital and post-photography. Different visions and modes of representation are addressed, such as photographic ‘truth’, photography as art, and photography as a means of mass communication (i.e. photojournalism, advertising, fashion and celebrities photographs, propaganda, etc.). In light of its multiple functions in art and culture, the photographic image is studied as part of a larger social, economic, institutional and ideological frame. (Students who have credit in FIN 108 may not take this course for credit)

Fine Arts History 238**Classical Studies 238 Religion 238 Greece, Land of the Gods 6-6-0**

This six-credit course examines the sacred art and architecture of ancient Greece from Mycenae to Byzantium on site in Greece. Offered in the Spring semester. After preliminary lectures on campus students will spend two weeks traveling to the major sacred sites of mainland Greece. Travel plans must be finalized by the middle of January prior to departure in May. Contact the Classics department for information.

Offered in May 2005.

Fine Arts History 240a Art, Popular and Mass Culture 3-3-0

A historical and theoretical exploration of the relationships between the ‘high’ and ‘low’ arts since Antiquity. Walter Benjamin saw traditional fine arts having an aura – a quality of being distant and unapproachable –, while reproducible works (i.e. photography, film, etc.) do not: they have to do with the here and now, which makes them popular. While addressing topics such as the Olympics, the Roman arenas, the printing press’ impact on the diffusion of ideas and literature, the effects of photography and mass media, this course examines the continuous reconfiguration in the definitions and boundaries between fine arts, popular and mass culture in light of social history, philosophy, psychology, and visual and cultural studies.

Fine Arts History 250ab Women in Art 3-3-0

This class surveys the history of women in art since the Middle Ages. The achievements of women artists and images of women are studied in relation to the shifting conditions of women’s lives. (Students who have credit in FIN 250 may not take this course for credit)

Prerequisite: Fine Arts History 101a, 102b, or consent of instructor, formerly FIN 101a, 102b

Fine Arts History 260 Art and Nature: From Landscape to Environmental and Ecological Art 3-3-0

This course analyses how the relationship between art and nature has been constructed through aesthetic and symbolic representations as diverse as that of the mystic Garden of Eden, landscape painting since the Renaissance, the sublime in nature, French and English gardens, and urban parks, such as Central Park. It also examines the direct involvement with nature in Earthworks and Land Art since the late 1960s and, as artists became conscious of environmental issues in the eighties, in Environmental Art, Ecological Art, and art interventions within ecosystems.

Fine Arts History 270 Convergences of Art and Science 3-3-0

This course examines the relationship of art and science since the Renaissance with particular attention to the critical and creative exploration of this relationship by artists and artist-scientist collaborators.

Fine Arts History 290 Current Topics in Art History 3-3-0

This course explores issues of current importance in the practice and interpretation of art. Possible topics include: Art and Audience; Sensation and Perception in Art; Expressing the Invisible in Art. Specific topic to be posted in advance of registration.

Fine Arts History 312a Art and Philosophy 3-3-0

This seminar course explores concepts of art and aesthetics that emerge from art, collections and exhibitions alongside those that are rooted in philosophical texts. The art to be examined ranges from the relics and marvels of the Middle Ages to contemporary experiments in artificial life; the texts include such authors as Plato, Aristotle, Augustine, Aquinas, Descartes, Leibniz, Kant, Foucault and Deleuze. (Students who have credit in FIN 312 may not take this course for credit)

Prerequisite: Fine Arts History 102 and at least three 200-level art history courses

Fine Arts History 314 Colonial and Postcolonial Issues in the Visual Arts 3-3-0

This course addresses colonial and postcolonial experiences of art. It examines topics such as the representation of the exotic 'other', the construction of the colonial subject, the ideology of the colonizer, the Eurocentric gaze, racism, the impact on modern art of primitivism, ethnographic museums, and World Fairs, and ambivalent notions of the 'primitive'. In conjunction with multiculturalism, identity politics, and globalization, the course also explores the place of non Western art in the international scene.

Prerequisite: Fine Arts History 102 and at least three 200-level art history courses

Fine Arts History 322 Seminar in 20th Century Art 3-3-0

Topics in art and theory of the last century.

Fine Arts History 323 Seminar in Art History, Theory and Criticism of Art I 3-3-0

Advanced course that explores in-depth a topic in art history, theory or criticism of art. Specific topics to be posted in advance of registration.

Prerequisite: Fine Arts History 102 and at least three 200-level art history courses

Fine Arts History 324 Seminar in Art History, Theory and Criticism of Art II 3-3-0

Advanced course that explores in-depth a topic in art history, theory or criticism of art. Specific topics to be posted in advance of registration.

Prerequisite: Fine Arts History 102 and at least three 200-level art history courses

Fine Arts History 340 Current Writing about Art 3-3-0

In this writing-intensive course, students are introduced to a range of research, interpretation and writing methods currently in use in the fields of art history and art criticism. In addition to studying recent art historical and critical texts, students learn the practical skills they need to write and present original scholarly work. Classes are focused on the critical presentations of published texts, workshops on research and writing, and presentations of student projects.

Prerequisite: Fine Arts History 102 and at least three 200-level art history courses

Fine Arts History 350ab Independent Study in Art History I 3-0-0

Open to students who have completed 27 credits in Art History. Students must submit a formal proposal to the department outlining a project to be undertaken independently in consultation with the instructor. Department approval is contingent on acceptance of the proposed project or course of research.

Prerequisite: completion of nine art history courses

Fine Arts History 351ab Independent Study in Art History II 3-0-0

Open to students who have completed 27 credits in Art History. Students must submit a formal proposal to the department outlining a project to be undertaken independently in consultation with the instructor. Department approval is contingent on acceptance of the proposed project or course of research.

Prerequisite: completion of nine art history courses

STUDIO COURSES

Foundation Level

Fine Arts Studio 140ab Foundation Studio 3-0-6

An introduction to the media of studio art involving practice in drawing, sculpture and painting, combined with discussion of concepts in the analysis of visual experience and art-making.

Fine Arts Studio 160ab Drawing I 3-0-6

This course is based on the premise that skills of visual observation derived from drawing are crucial to further studio practice. Furthermore, this quality of observation forms the basis of developing the creative mind. Students will be required to exercise their skills of observation of form, proportion, value, and movement.

Fine Arts Studio 170ab Sculpture I 3-0-6

Students will be introduced to a study of three sculptural languages: the glyptic (subtraction), the plastic (substitution), and the linear (addition). Although group discussions will be employed, this aesthetic inquiry will primarily take the form of individual hands-on activity as the basis of group critical/theoretical study.

Fine Arts Studio 175ab Introduction to Fibre Art 3-0-6

An introduction to the nature and possibilities of fibres and to their use in art. Two and three-dimensional studio projects using techniques such as wrapping, fabric manipulation, dyeing, and papermaking, will take into account the characteristics of the material and the process.

Fine Arts Studio 180ab Colour: Theory and Practice 3-0-6

Studio projects involving the use of watercolour and gouache. The course will explore the range of media associated with small scale format and more informal modes of expression.

Fine Arts Studio 181ab Painting I 3-0-6

A course in painting with acrylics and/or oils on a variety of surfaces: stretched canvas, free hanging canvas, wood, paper, and others. Students will be encouraged to develop personal images through a series of exercises designed to familiarize them with: 1) various oil and acrylic techniques; 2) grammar of painting-form, texture, colour, composition; 3) subject matter, either abstract or figurative.

Formerly Fine Arts 280

Students who have taken Fine Arts Studio 281ab (formerly FIN 281) may not take Fine Arts Studio 181ab (formerly FIN 181) for credit.

Fine Arts Studio 182ab Photography I 3-0-6

This will be an introductory level course. As well as exploring the basics of photography from shooting to printing, several creative techniques will be introduced. The course will be structured around projects with specific cognitive goals which the student will be asked to explore. A portfolio submission will be required at the end of the course.

Formerly Fine Arts 295

Students who have taken Fine Arts 295ab may not take Fine Arts Studio 182ab for credit.

Fine Arts Studio 190ab Printmaking I 3-0-6

A course in the use of linoleum, etching, and silkscreen techniques for the production of monoprints and multi-prints. Students learn how to employ the printmaking media for expressive purposes according to personal preferences. In the process, they develop their sense of colour and form as well as their ability to articulate subject matter, whether of an abstract or figurative nature. Throughout the course students engage in critical discussion of their work with fellow students.

Intermediate Level

Fine Arts Studio 260ab Drawing II 3-0-6

A variety of exercises in drawing from the model that are directed towards the development of disciplined observation and technical control of the graphic media.

Prerequisite: Fine Arts Studio 160ab, formerly FIN 160ab

Fine Arts Studio 271ab Sculpture II 3-0-6

This course will involve a presentation of a system of aesthetic inquiry in which each student becomes increasingly aware of the process by which his/her imagery evolves while interacting with a variety of sculptural languages.

Prerequisite: Fine Arts Studio 170ab, formerly FIN 170ab

Fine Arts Studio 275 Fiber Art II 3-0-6

This course is a continuation of Introduction to Fiber Art.

Prerequisite: FIS 175ab.

Course usually offered off campus

Fine Arts Studio 281ab	Painting II	3-0-6
Further projects in painting for more advanced students. <i>Prerequisite: Fine Arts Studio 180ab or 181ab (formerly FIN 180ab and 181ab)</i>		
Fine Arts Studio 285	Landscape Drawing and Painting II	3-0-6
This course is a continuation of Landscape Drawing and Painting. <i>Prerequisite: FIS 185ab.</i> <i>Course usually offered off campus</i>		
Fine Arts Studio 291ab	Printmaking II	3-0-6
In this course students select one of the printmaking techniques learned in Fine Arts Studio 190ab (formerly FIN 190). In their chosen medium they are then expected to develop a consistent personal approach with regard to subject matter and techniques. Students are encouraged to enlarge their technical ability through continuous experimentation, and their intellectual understanding through participation in critical discussions of their own work and, whenever possible, the works of artists observed in current exhibitions. <i>Formerly Fine Arts 191</i> <i>Students who have taken Fine Arts 191ab may not take Fine Arts Studio 291ab for credit</i>		
Fine Arts Studio 296ab	Photography II	3-0-6
This course will be a continuation and development of the basic techniques and concepts explored in Photography I. The student is expected to have a working knowledge of photography. This course will expand on those techniques as well as explore such experimental techniques as solarizing, toning, and negative printing. The student will also be introduced to contemporary issues and practices in photography and be expected to address them in his/her own work through various assigned projects. There will be a comprehensive portfolio presentation at the end of the course. <i>Prerequisite: Fine Arts Studio 182, formerly FIN 182</i>		
Advanced Level		
Fine Arts Studio 261ab	Drawing III	3-0-6
A continuation of studies in life drawing. <i>Prerequisite: Fine Arts Studio 260ab, formerly FIN 260ab</i>		
Fine Arts Studio 300	Drawing IV	3-0-6
This course will focus on Drawing in its relation to contemporary practice. Experimental aspects of drawing will be explored in a variety of media. Students will discover how drawing may address a range of problems and concepts beyond rendering of three-dimensional objects on a two-dimensional surface. <i>Prerequisite: FIS 261ab</i>		
Fine Arts Studio 302ab	Photography III	3-0-6
This course will explore, through a variety of techniques and small assigned projects, critical issues in contemporary photographic art practice. Some of these would include: Walter Benjamin's notions regarding art works in the age of mechanical reproduction; the discourse of the copy versus the "original"; photographic appropriations and simulacra; media representations and their ability to shape personal identity; and also contextualizations of photographic images to create and change meaning. The student would then be expected to create a body of work exploring an important issue from a personal point of view. <i>Prerequisite: Fine Arts Studio 296, formerly FIN 296</i>		
Fine Arts Studio 372ab	Sculpture III	3-0-6
An advanced course in sculpture which will engage the student in a more intensive specialized area of 3-dimensional design. Each student will be required to choose a course of study in one of the following areas: the plastic, the linear, or the glyptic. <i>Prerequisite: Fine Arts Studio 271ab, formerly FIN 271ab</i>		
Fine Arts Studio 373	Sculpture IV	3-0-6
This course is a continuation of Sculpture III. <i>Prerequisite: FIS 372ab</i>		
Fine Arts Studio 382ab	Painting III	3-0-6
Painting III challenges the experienced student with several in-depth projects that simultaneously investigate topical oppositions and probe the language of painting for its own sake. Conceptual, spiritual, and deconstructive standpoints are addressed. Scale varies from serial, icon-size supports to large scale stretched canvasses. Contemporary and historical paintings are used as points of reference. <i>Prerequisite: Fine Arts Studio 281ab, formerly FIN 281</i>		
Fine Arts Studio 383	Painting IV	3-0-6
This course is a continuation of Painting III. <i>Prerequisite: FIS 382ab</i>		

Fine Arts Studio 384	Photography IV	3-0-6
The advanced student is expected to create a body of work exploring an important issue from a personal point of view. The student will also contextualize his/her work within contemporary photographic practices and issues. <i>Prerequisite: FIS 302ab</i>		
Fine Arts Studio 385	Printmaking III	3-0-6
This course is a continuation of Printmaking II. <i>Prerequisite: FIS 291ab</i>		
Fine Arts Studio 390ab	Independent Study in Studio Art I	3-0-0
Fine Arts Studio 391ab	Independent Study in Studio Art II	3-0-0
Fine Arts Studio 392ab	Independent Study in Studio Art III	3-0-0

STUDIO COGNATES

Fine Arts majors normally will be permitted to take 6 cognate credits that will count towards the Studio component from among: DRA 101, 160, 161, 250, 251, and 262. With permission of the department, studio honours students may be permitted to take additional cognate courses. Fine Arts minors may apply one of the above cognates towards the minor.

COMPARATIVE ARTS COURSES

Majors are required to take 6 credits from the following list.

Fine Arts 209/Phy112	Introduction to Holography	3-1-4
This course is designed to give students an introduction to the principles of laser holography (3-D photography) while at the same time providing them with the opportunity to create holograms in the laboratory. No background in math or science is required. Students will make holograms using single and multiple beam reflection and transmission techniques. Special topics related to the making of rainbow, colour, and other types of holograms will be discussed and attention will be given to the application of this medium as a form of visual expression. In addition, students will be able to apply their knowledge to create holograms at home (sandbox holography). <i>Prerequisite: Permission of the instructor.</i> <i>See Physics 112</i> <i>Students may not take this course for credit if they have received credit for Physics 112</i>		
Fine Arts 218a	Digital Imaging for the Artist	3-3-0
This course serves as an introduction to current practice on the computer in the graphics arts industry. Students will gain proficiency in the use of various software particularly Photoshop, Illustrator, and QuarkXPress on a Macintosh platform. <i>Prerequisites: FIS 160, FIS 181 or FIS 182 (formerly FIN 160, 181 or 182)</i>		
Fine Arts 222	Art Therapy	3-3-0
This course acquaints students with the field of art therapy, by addressing relevant psychological background, theory and research as well as are therapy history approaches, and research. The course will include pertinent, gently guided practical experiences introducing students to therapeutic possibilities of art making. <i>Not regularly offered.</i>		
Fine Arts 235ab	Museology	3-3-0
An introduction to theoretical and practical aspects of museology. The history and function of art museums, collection and conservation, museum administration and the organization of exhibitions are treated in the course, which includes projects in exhibition management. <i>Prerequisite: Fine Arts History 101a, 102b (formerly FIN 101a, 102b), or consent of instructor</i>		
Fine Arts 292	Sociology of Art	3-3-0
An introduction to the Sociological study of the Arts. The course focuses on the social practices and organizational frameworks related to artistic production/creation, mediation processes, and the reception of art works and artists. Attention will be given to issues related to race, gender, class, and power. <i>Professor Coulter</i>		
Fine Arts 301	Art Education: Theory and Practice	3-3-0
This course investigates various historical and critical approaches to Art Education as a basis for structuring Studio art classes. Students will develop a variety of skills and techniques which they will apply to the planning and teaching of art in educational settings. Using studio activities, students will present a variety of paradigms for teaching studio classes to their fellow students. <i>Prerequisites: completion of 12 Art History (FIH) and 12 Studio credits (FIS)</i>		

Fine Arts 303 **Preparation of a Professional Portfolio** **3-3-0**
 The purpose of this course is to encourage students to situate their works within the broad stream of contemporary art as a means of either continuing their study in a variety of fields at the graduate level, or as a preparation for a career as practicing artists. The students should use this course to prepare a professional portfolio of their works, as well as to consider some of the conceptual approaches within which, or against which, they will be operating as contemporary artists.
Prerequisites: completion of 12 Art History (FIH) and 12 Studio credits (FIS)

Courses requiring no prerequisites:

CHE132	The Chemistry of Art Restoration
CLA120	Classical Archaeology
DRA 170	Introduction to Film
ENG 106	Approaches to Literary Criticism
ENG 235	Cultural Studies History, Theory, and Practice
ENG 280	Literature and Film
ENG 281	Films of Marlon Brando
ENG 282	Film Adaptation
GER 370	Introduction to German Film
PHI 246	The Philosophy of Art
REL 237	Religion and Film

Courses requiring prerequisites:

AAD 250	Arts Administration I
AAD 251	Arts Administration II
AAD 252	Arts Administration III
CLA 240	Archaeological Interpretation
CLA 365	Topics Archaeology I
CLA 366	Topics Archaeology II
DRA 319	Film Criticism and Theory
ENG 234	Contemporary Critical Theory
PHI 364	Postmodernism
SPA 318	Spanish Cinema
SOC 225	Quebec Society II

Certificate in Studio Arts

30 credits

Description

The Certificate in Studio Arts is a structured program of study in Fine Arts with an emphasis on studio courses offered by the Department of Fine Arts.

For part-time community students who do not wish to pursue a degree program, the Certificate in Studio Arts presents a rounded introduction to studio practice. Courses leading to the Certificate in Studio Arts are offered in the regular Fall-Winter semesters, the evening Summer session and the Fine Arts Summer School.

Credits obtained in the certificate program may be applied eventually towards a major or minor in the degree program in Fine Arts. Students may not be enrolled simultaneously in a degree program and the Certificate in Studio Arts.

Admission requirements: *(See Regulations for Certificate Programs).*

Transfer credits: A maximum of nine unassigned Fine Arts credits may be transferred from courses taken by a student at another university.

1) Required courses: 6 credits

FIH 101ab (formerly FIN 101ab)	Survey of Western Art I: Prehistory to Medieval	3-3-0
FIH 102ab (formerly FIN 102ab)	Survey of Western Art II: Renaissance to Modern	3-3-0

2) The remaining 24 credits must be chosen from the Studio course list.

FIS 160ab (formerly FIN 160ab)	Drawing I	3-0-6
FIS 170ab (formerly FIN 170ab)	Sculpture I	3-0-6
FIS 180ab (formerly FIN 180ab)	Colour Theory and Practice	3-0-6
FIS 181ab (formerly FIN 181ab)	Painting I	3-0-6

And any 12 credits chosen from other 100 and 200 level studio courses (see Fine Arts Studio section)

History

In an increasingly compartmentalized and specialized world, historical study is one of the best ways to promote an ability to synthesize information, to expand cultural awareness and to gain access to the many creative ways in which humans have responded to the challenges which face them. In addition, historical study deepens a number of specific skills which are invaluable assets for graduates entering the labour market and taking on the duties of citizenship, such as the ability to engage in research, to evaluate evidence and to present conclusions in a reasoned and coherent way. Traditionally, history graduates have gone on to careers in teaching, journalism and law, or to graduate studies in history, archival studies, museology, international affairs and public administration, but history graduates also fare well in today's knowledge driven economy because of their well-honed communication and research skills. Many recent graduates are now employed in the private sector, often in communications and management capacities.

Areas of Specialization

The History Department offers introductory courses, and courses which cover the historical development of three main geographic areas: North America, Europe and the Developing World.

In the senior years, courses reflect the research interests of its faculty, which include native and northern history, public history, environmental history, cultural and political history, military history, history of communications and technology, gender and family history, and the history of disease.

The Program

We believe that all graduates, whether Majors or Honours, must possess the ability to undertake self-directed intensive research, to be familiar with a wide range of past societies and to be aware of the interpretive and methodological options for analyzing them. The programs are constructed to allow students to acquire this knowledge and develop these skills. In the first year of the program, students learn about the main currents and major phases of history; they acquire the skills necessary to contextualize primary documents and to analyze them in order to extract usable historical data. At the same time, they are introduced to the major interpretive approaches of

historians, developing an ability to read secondary sources in an efficient and critical manner. Finally, students learn to construct significant research hypotheses, to design a viable research plan and to present the results of their research in a reasoned and coherent manner.

In the following years students gain a deeper familiarity with the histories and historiography of Europe (especially Western Europe), of North America and the developing world, through more intensive chronological/geographic surveys. In the 200 and 300 level courses, discussion and debate begins to form a larger portion of the instructional method than in the introductory surveys. The 300 level courses approach the past from a thematic and comparative perspective, providing an introduction to a number of historical subdisciplines, as well as to their unique methodologies and rich theoretical literature.

The 400 level seminars are our capstone courses. In these courses, students have an opportunity to deepen their knowledge of a particular period or theme through a more thorough reading of relevant literature. The seminar format also fosters student participation and contribution to an ongoing communal research effort through debate, discussion, oral presentations and commentary. Finally, seminar participants engage in intensive research (including primary sources) on a specific topic within the area, present their research program and findings to colleagues and learn to revise their final papers or reports in light of commentary and criticism from the instructor and their peers.

PROGRAMS AND REQUIREMENTS

Honours in History

Students enrolled in the honours program must successfully complete 60 credits in history courses or cognates in which they must maintain an overall average of 70%. The last 30 credits of the program must be completed at Bishop's. The 60 credits required for the Honours degree must include:

- History 110; two of History 104, History 107 and History 109 for students in the 90-credit B. A. program; History 110; two of History 104, History 105, History 107 and History 109 for students in the 120-credit B.A. program.
- A minimum of 18 credits in 200 level courses (National Histories and Surveys) including six credits in North American history, six credits in European history, three credits in the history of the Developing World, and HIS 200.
- A minimum of 12 credits in 300 level courses (Thematic, Comparative and Area Studies),
- A minimum of 12 credits in 400 level courses (Seminars).

Major in History

Students enrolled in the Major in History must successfully complete 48 credits in history courses or cognates, of which a minimum of 24 credits must be completed at Bishop's. The 48 credits required for the Major must include:

- History 110; two of History 104, History 107 and History 109 for students in the 93-credit B. A. program; History 110; two of History 104, History 105, History 107 and History 109 for students in the 123-credit B.A. program.

- A minimum of 18 credits in 200 level courses (National Histories and Surveys) including six credits in North American history, six credits in European history, three credits in the history of the Developing World, and HIS 200.
- A minimum of 9 credits in 300 level courses (Thematic, Comparative and Area Studies).
- A minimum of 6 credits in 400 level courses (Seminars)

Major in Public History

Public history is a growing field, with new opportunities opening for history majors in recent years in such areas as historical societies, museums, corporations, municipalities, NGOs, provincial and federal government agencies and private genealogical enterprises. The program provides students with the opportunity to explore a variety of non-teaching careers in history and prepare them for employment in a field which is expected to continue to show expansion. Students enrolled in the Public History Major must successfully complete 48 credits in history courses or cognates, of which a minimum of 24 credits must be completed at Bishop's. The 48 credits required for the Public History Major must include:

100 level:

HIS 110; two of HIS 104, HIS 108 and HIS 109 for students in the 93-credit B.A. program;

HIS 110; two of HIS 104, HIS 105, HIS 108 and HIS 109 for students in the 123-credit B.A. program.

200 level:

HIS 200

6 credits in Canadian or Quebec history

6 credits in Europe and/or Developing World (*3 credits may be replaced by * below*)

3 credits in HIS 240 Introduction to Public History

300 level: 9 credits total

At least 3 credits among:

HIS 391 Archival or Institutional Internship
HIS 392 Research Internship

The remainder among:

HIS 328 Native/Settler Relations in Canada
HIS 332 The Celluloid Republic
HIS 333 Society & the Environment
HIS 368 The Young in Western Society
HIS 371 A History of Communications
HIS 372 Historical Methods and Primary Source Research
HIS 373 War and Canadian Society
HIS 379 Technology and Society in N.A. 1850 to Present
FIN 235 Museology

*3 credits in the above list may be replaced by * below*

400 level: 6 credits total

3 credits in HIS 450 Public History seminar

3 credits from:

HIS 413 British North America
HIS 414 Environment and Society in North America
HIS 432 Social History of Disease in the West

HIS 449 English Family from the Black Death to the Present

HIS 455 Public History Practicum

* Up to 6 credits from the following list of courses may be used to replace a 200-level European or Developing World course, and/or a 300-level course from the non-internship list.

BMG 214 Introduction to Entrepreneurship

FIN 218 Digital Imaging for the Artist

POL 214 Public Administration

POL 334 Public Policy Analysis

Minor in History

Students enrolled in the minor must complete 24 credits in History courses or cognates including:

- 6 credits in 100 level courses
- A minimum of 12 credits in 200 or 300 level courses including 3 credits in each of the three geographic areas offered by the Department

Indigenous Studies Minor

The Indigenous Studies Minor (ISM) is designed to introduce students, through an interdisciplinary approach, to the global processes of cultural encounters and the resultant responses of resistance, accommodation, and adaptation. Students will be exposed to theories and world-wide applications of, and responses to, imperialism and colonialism, as well as decolonization and post-colonialism.

Program prerequisites:

No specific prerequisites are necessary, except for the ESG courses which will be subject to the instructor's approval. See the Calendar for details.

Course sequence:

The Minor requires the completion of 24 credits; one of which must be either HIS 108, Introduction to Indigenous Studies: Contact and Colonization, ENG 123 Introduction to Indigenous Literatures or SOC 107 Introduction to First Nations Societies. The other mandatory course would be at the higher end of the student's scholastic learning: HIS 404 The Numbered Treaties, ENG 358 Approaches to Indigenous Literary Cultures in Canada or SOC 396 Post Colonial Theory. Both sets of mandatory courses are designed to give students the opportunity to experience Indigenous Studies within an interdisciplinary framework. The remaining 18 credits must be taken from the list of courses below. Note that the courses will be offered on a rotational basis so students may wish to consult with the course instructor or the ISM coordinator when considering their course options.

The required courses for the minor are the same for the 123-credit and 93-credit programs.

ONE of the three following courses:

HIS 108 Introduction to Indigenous Studies:

Contact and Colonization

SOC 107 Introduction to First Nations Societies

ENG 123 Introduction to Indigenous Literatures

SIX (18 credits) from:

HIS 328 Native/settler relations

HIS 257 Latin America to 1800

HIS 272 History of Modern India

HIS 276 History of Modern Africa

HIS 279 The Middle East in the Twentieth Century

CLA 245 Art and Archeology of the American Southwest

ENG 228 Introduction to Post-Colonial Literature

ENG 375 Colonial Narratives

REL 257 History of Christianity II

ESG 339 The Canadian Arctic

ESG 340 The Circumpolar North

ESG 350 Environmental Justice

POL 234 Politics of Africa

POL 236 Middle East Politics

POL 335 Politics of Latin America and the Caribbean

SOC 207 First Nations: No Place to call Home

SOC 209 Young Offenders

SOC 235 Women and the Penal System

SOC 395 Advanced Theories of Social Sustainability

ONE of:

HIS 404 The Numbered Treaties

ENG 358 Approaches to Indigenous Literary Culture in Canada

SOC 396 Post-Colonial Theory

INTRODUCTORY COURSES

History 104 The Development of the West 3-3-0

An introduction to the major developments in Western history from the end of the ancient world to the early nineteenth century. Topics will include the origins and evolution of medieval civilization, and its breakdown in the Renaissance and the Reformation; political, cultural and economic developments in early modern Europe, and the challenges to the ancien regime posed by the French and industrial revolutions.

History 105b The 20th Century World 3-3-0

The 20th century has been an age of extremes. It has witnessed the rise of human rights, great economic and social transformations, and wars of unprecedented severity. Topics to be discussed include the rise of totalitarian movements, notably fascism and communism, warfare, de-colonization, economic crisis, the genocides of the 20th century in Europe and Asia, and the post-1945 East-West schism.

History 108 Introduction to Indigenous Studies: Contact and Colonization 3-3-0

This introductory course is designed to acquaint students with the global processes of contact and colonization through the presentation of colonial and post-colonial theory and the examination of specific case studies within Asia, Africa and North America. While largely historical in content, guest speakers and other resources will be used to expose students to interdisciplinary approaches to studying these continuing phenomena.

History 109ab New World: The Americas to 1850 3-3-0

An introduction to the history of North and South America from the pre-Columbian era to the mid-19th century. The main topics include a survey of pre-Columbian civilizations, contact between native Americans and Europeans, the rise and fall of European empires in the Americas, the creation and growth of independent nation states in the New World.

HISTORIOGRAPHY AND METHODS COURSES

History 110a Introduction to Historical Studies 3-3-0

This first-year course is designed for History Majors. Paired with one of the introductory survey courses, it will introduce students to the ways in which historians practice their profession, through the use of primary material, the critical assessment of secondary works, the exploration of basic research strategies, and interpretive discussion and debate.

Co-requisite: ILT 102

History 200ab Approaches to the Past: History in Theory and in Practice 3-3-0

This course will provide an analytical survey of the development of the historical consciousness from the ancient world to the present, through a detailed examination of selected classical, medieval, modern and postmodern texts. Philosophical issues in the study of the past, such as causation, objectivity and the nature of historical explanation will also be covered.

Not open to students with credit in HIS 367

History 240ab Introduction to Public History: Community Heritage and the Preservation of the Everyday 3-3-0

Using the rich historical resources of the Eastern Townships, including its various archives, museums and historical societies, students will learn about, and do, the work of public historians in the fields of local history, material culture, heritage and preservation. Readings, lectures and films will also be used to supplement students' experiences of public history and the contexts in which it operates.

History 372ab Historical Methods and Primary Source Research 3-3-0

This course focuses on methodological approaches through an examination of important studies in the fields of social, economic, cultural and political history. Students will also apply research and analytical techniques in a project based on primary source materials.

NATIONAL HISTORIES AND SURVEYS

North America

History 207 Canada 1867-1945 3-3-0

This course will trace the political, social, economic, and cultural history of the Canadian federation from 1867 to 1945. Special attention will be given to such topics as geographic expansion, relations among the founding peoples, the Riel Rebellions, the move towards Canadian autonomy, foreign relations, the world wars, the role of women in society, the Great Depression, and politics and reform movements.

History 211ab Canada Since 1945 3-3-0

This course will trace the political, social, economic, and cultural history of Canada since the end of World War Two. Special attention will be given to such topics as post-war economic prosperity, relations with the United States, the "golden age" of Canadian foreign policy, the baby-boomer generation, feminism and the rights of women, constitutional change, Medicare, bilingualism, Pierre Trudeau, and multiculturalism.

History 214ab The United States, 1877-1945 3-3-0

This course will examine American political, social, cultural, economic, diplomatic, and military history from the era of reconstruction until the end of World War II. Special emphasis will be placed upon industrial growth, continental expansion, the closing of the frontier, urbanization, immigration, progressivism, the two world wars, the depression, and America's rise to global power.

History 215ab The United States to 1877 3-3-0

This course traces the evolution of American society from the Colonial period, through the Revolutionary Era to the Civil War and Reconstruction. Among the topics to be discussed are the colonial experience, the forging of American republicanism, the Constitution, the growing complexity of ante-bellum society, the problem of slavery and the crisis of American federalism.

History 217ab The United States Since 1945 3-3-0

This course will examine American political, social, cultural, economic, diplomatic, and military history since 1945. Emphasis will be placed on the postwar economic boom, social change, civil rights, the cold war confrontation, the war on poverty, the 1960s and the war in Vietnam, Nixon and Watergate, Reaganism, and the culture wars of the 1990s.

History 221ab Pre-Confederation Canada 3-3-0

A history of the various Canadian peoples and communities of pre-Confederation Canada beginning with First Nations through the establishment of French-Canadian society on the St Lawrence, the Anglo-American settlers of early Nova Scotia, the Loyalists of Ontario and the Maritime provinces, and including the migrants of the early nineteenth century. The focus of the course will be on social, economic and cultural development.

History 265ab Québec: Political Change and Industrialization 1840-1930 3-3-0

Beginning with the Union period, this course traces the main political, economic and social developments of an age marked by Confederation, the growing conflicts between French and English Canada, and successive waves of industrialization and urbanization. The course will also deal with cultural development in this period, with particular emphasis on the struggle between liberalism and traditional nationalism.

History 266ab Contemporary Québec: 1930 to the present 3-3-0

A social, political and economic history of Quebec from the Depression to the present which highlights the transformations wrought by World War II and the Quiet Revolution. Topics to be examined include the decline of clerical influence, the rise of the labour movement, the emergence of new Québécois elites, the evolution of the provincial state, the evolution of nationalism and the growth of the sovereignty movement.

Europe

History 232ab France: Enlightenment & Revolution 3-3-0

An examination of eighteenth-century social and political controversies, key enlightenment figures and intellectual trends, the 1789 Revolution, counter-revolution, the Terror, and Napoleon.

History 233ab Britain in the Twentieth Century 3-3-0

British politics and society from the Edwardians to the present. Major topics will include the impact of the two World Wars, economic and social developments in the interwar and postwar periods, the interwar crisis in foreign relations, the emergence of the Welfare State and the rise and fall of consensus politics.

History 237ab The Formation of Modern Europe 1815-1914 3-3-0

This course will provide an analysis of the concepts, forces and movements which created modern Europe in the nineteenth century. It will study the articulation of ideologies, the contest for emancipation in its various forms, the construction of new concepts of citizenship and political power, the technological and economic growth of the period, with its associated social tensions, and the growing rivalries among the emerging nation-states of the Continent. It will end by looking at the internal and external conflicts - socioeconomic, political and cultural - that set the stage for the murderous struggles of the early 20th century.

Not open to students with credit in HIS 365

History 238ab Russia in the Twentieth Century 3-3-0

An examination of the main features of Russian and Soviet history from the Russo-Japanese War and the 1905 Revolution to the present. Elements of continuity and discontinuity in that history will be highlighted. Focus will be placed on the Revolutions of 1917, the two World Wars, collectivization and industrialization and post-WWII expansion, consolidation and rivalry with the West.

History 243ab Medieval England 3-3-0

A comprehensive survey of English history from the Anglo-Saxons to the late fifteenth century. Attention will be given to the development of English institutions in the pre-Conquest period, the impact of the Norman Conquest, the development of feudalism and feudal monarchy, medieval society and economy, and the growth of parliamentary institutions.

History 246ab Medieval and Early Modern Ireland 3-3-0

This course will provide a broad survey of Irish political and social history in the medieval and early modern periods. The course is divided into three parts. In the first section the Norman invasion and the struggle for the lordship of Ireland will be examined. The second part will deal with the impact on Ireland of the Tudor conquest, the Reformation and the British wars of the seventeenth century. The third part will chronicle the state under the Protestant ascendancy, prior to the union of 1801.

History 247ab Modern Ireland 3-3-0

This course examines the history of Ireland since the rebellion of 1798. Particular themes include Anglo-Irish relations, famine and emigration, nationalism and Home Rule, unionism and Ulster, cultural achievement, partition and independence.

History 248ab Early Modern England 1500 to 1750 3-3-0

A survey of the transition of England from a feudal polity and society into a modern nation, focusing on themes of stability and conflict from the Tudor period until the mid-eighteenth century. Major topics to be studied include the rise of the Tudor State, economic and social change in the early modern period, constitutional and religious crises and their resolution in the seventeenth century, the rise of Empire and the development of a pre-industrial economy and society.

History 249ab Britain in the Liberal Age 1750-1914 3-3-0

This course will study the interaction of political, social, economic and cultural change from 1750 to World War I. Topics to be examined include the experience of and response to industrialization, the rise of economic and political liberalism, the changing forms and growth of organised labour, foreign policy and imperialism, the ethos of the Victorian age — domestic, moral and cultural — and its late nineteenth century transformation.

History 253ab A History of Medieval Europe 3-3-0
This course is an introduction to the history of Europe from the breakdown of the ancient world to the beginning of Modern Europe. After a survey of the Germanic, Roman and Christian roots of medieval society, special attention is given to those institutions and developments which characterized the civilization of the high Middle Ages: the 12th century renaissance, the Christian ideal, the medieval university, relations between church and state, feudal society, the crusades, chivalry and the medieval style in the fine arts.

Developing World

History 256ab Latin America 1800 to the Present 3-3-0
This course will survey the history of Latin America and the Caribbean from c. 1800 to the present day. The course will deal with the major social, economic and political processes of the period. The class will also provide insight into problems of development and underdevelopment as well as a discussion of the movements for social change.

History 257ab Latin America to 1800 3-3-0
This course will provide a survey of the history of Latin America and the Caribbean from pre-Columbian times to the wars of independence. Topics to be explored include the nature and development of pre-Columbian cultures and civilizations, the impact of European contact and transatlantic migrations, the formation and evolution of colonial societies, economies and cultures, and the origins of national political movements in the late 18th century.

History 272ab The History of Modern India 3-3-0
This course aims at an integrated overview on the main components of India's cultural heritage and social structures; the development of distinct political institutions as well as movements of resistance, communalism and nationalism during Britain's colonial rule from the end of the Mogul empire to India's independence in 1947.

History 276ab A History of Modern Africa 3-3-0
This course will study the evolution of the African continent from the beginning of colonial imperialism in 1870 to the end of the Apartheid system in South Africa in 1994. The making of colonial empires and their political, economic, cultural and social impact on Africa will be explored, while the struggle for decolonization and the gaining of independence will provide a deeper understanding of the continuing structural problems of African postcolonial states. Postcolonial issues as neocolonialism, underdevelopment, PanAfricanist ideology, the Apartheid system and Rwanda's genocide also will be analyzed in both diachronic and synchronic perspectives.

History 278ab A History of the Middle East to 1919 3-3-0
The course includes an introduction to the legacy of early and pre-Islamic civilizations in the Middle East, an examination of the rise and influence of Islam in the region, an account of the emergence, growth and decline of the major Islamic empires, and an assessment of their achievements and challenges. Special attention is given to the relations between the Middle East and the West and particularly to the role of the Great Powers in the affairs of the Ottoman and Persian empires. The interactions of the West and the Middle East prior to 1919 greatly influenced the course of Middle Eastern history and politics up to the present.

History 279ab The Middle East in the Twentieth Century 3-3-0
The course is a study of the forces and events that have shaped the contemporary Middle East since the First World War. It explores the role played by Western colonial powers in forging a new political and territorial order in the region, the rise and growth of nationalism and the struggles for independence that marked the first half of the century. It examines the stormy relations between the Middle East and the West after the Second World War and the ways in which the involvement of major world powers in the area and internal regional developments molded the political evolution of the contemporary Middle East. Special attention will be given to the growing dominance of the United States, the resurgence of Islam, the Arab-Israeli conflict and the Gulf wars.

History 281 History of Pre-colonial Africa 3-3-0
This course will examine the evolution of the African continent from the 12th to the mid-19th century. Topics to be studied include the origins of African kingdoms and their political, economic and social organizations. Important aspects of the African civilizations such as oral and religious conceptions (animism and Islam), artistic, architectural, philosophic and literary realizations will be examined in both North and Sub-Saharan Africa. The phenomenon of domestic and transatlantic slavery will be deeply analyzed, in particular its origins, justifications and manifestations and also the factors that led to its demise.

History 283ab A History of Chinese Civilization 3-3-0
This course introduces China's history and cultural heritage from antiquity to the end of the 19th century C.E. Political history, modes of governmental and socioeconomic organization, and developments in thought and religions will be examined in three major epochs: a formative age, from antiquity into the third century B.C.E.; an early imperial age, from the third century B.C.E. to the 10th century C.E.; and a later imperial age, from the 10th century C.E. to the late 19th century C.E.

History 284ab Twentieth-Century China 3-3-0
The course examines China's transformation into a modern nation-state. Topics to be discussed include China's four political revolutions, the role of Japanese aggression and civil war, the construction of an industrializing economy, as well as the transformation of Chinese society and culture.

History 285 The Global Economy in the Asian Age, 1400-1800 3-3-0
Now that we are witnessing the rise of an Asia-centered world with China and India as its locomotive, we need to ask whether this development represents a return to Asia's traditional dominance before 1800. This course will describe the pattern of global trade during the period 1400-1800. The role of money in the global economy, the interaction between European expansion and other parts of the world will be discussed. Factors leading to the rise of the West as the leader of the world system after 1800 will also be examined.

THEMATIC COURSES, COMPARATIVE COURSES AND AREA STUDIES

History 315 The American Civil War and Reconstruction 3-3-0
This course surveys events contributing to sectional strife in the late antebellum period and explores scholarly interpretations of both the Civil War and Reconstruction. It also deals with how these formative periods have been remembered by succeeding generations of Americans. The course examines the military campaigns and draws on recent advances in social, cultural, and African-American history to study the home fronts and identify social changes in both the North and South that help to provide new perspectives on Emancipation, the politics of

History 328ab Reconstruction, and the onset of Redemption. Native/Settler Relations in Canada 3-3-0

Through a variety of lectures, readings and films, this course will focus on the legal and political issues and events that have shaped Native/settler relations from 1763 to the present. Topics to be examined include: treaties, education, the Indian Act, Aboriginal protest movements and self-government negotiations.

History 331ab Women in 19th and 20th Century Canada 3-3-0
This course will expose students to a variety of issues and experiences that have been historically relevant to women. Particular attention will be paid to the experiences of Aboriginal women, the impact of changing technology on women's work and women's participation in politics.

History 332ab The Celluloid Republic 3-3-0
This course focuses on Hollywood's role in shaping and reinforcing the core values, symbols and dominant paradigms of Americans political culture from the 1930's to the 1980s. Insights derived from the work of political and cultural historians will be brought to bear in an analysis of films including Mr. Smith Goes to Washington, Citizen Kane, The Manchurian Candidate and All the President's Men.

History 333 Society and the Environment 3-3-0
The purpose of this course is to introduce students to the environmental history of Canada, particularly during the 20th century, with an emphasis on the social construction of nature by Canadians and the relationship that exists between the environment and society as a result. Discussions of issues such as natural resource extraction, monocultural forests and farmlands, Aboriginal land claims and the development of national parks will be underpinned by theoretical explorations of concepts such as landscape, conservation and traditional ecological knowledge.

History 352ab History of the Arab-Israeli Conflict 3-3-0
This course will give students a thorough understanding of the history of the Arab-Israeli conflict. It will identify and examine the main issues, themes and events which have characterized and shaped the conflict over the past century, from the origins of political Zionism in the late nineteenth century to the present impasse and the future prospects for peace. The conflict will also be paced in its wider context of the history of the Middle East and the West, and their interaction.

History 355 The Great Irish Famine 3-3-0

This course will examine the relationship between Britain and Ireland in the nineteenth century and the causes that led to the famine. Government response to poverty in the 19th century in general and the British government's response to the Irish Famine in particular will be the main focus of the course but it will also explore philanthropic responses and the role of the churches. The consequence of the famine for Ireland and North America will be examined with a special focus on Canada East (early Quebec). Finally, the course will explore the construction of historical memory regarding the famine and its impact on our understanding of Ireland today.

History 359ab American Foreign Relations in the Twentieth Century 3-3-0

The participation of the United States in world affairs from the Spanish-American War to the Cold War: the conflict of ideals and self-interest, of ideology and realism, in the conduct of foreign policy

History 363ab Europe in Crisis, 1450-1648 3-3-0

This course examines the steady decline and near collapse of European civilization from a high point of cultural innovation in the Renaissance to the depths of the Thirty Years War. Topics include European aggression in the new world, the splintering of Catholic unity, the witch panics, the formation of states, strategies of control and repression.

History 364ab European Imperialism, 1870-1918 3-3-0

Few nineteenth-century topics have generated more controversy than the establishing of a European overseas hegemony. The course examines the motives behind expansion within the metropolitan states and the impact of the European presence on those areas of the globe which became the objects of a European embrace.

History 366ab European Diplomacy since 1914 3-3-0

This course examines the international relations and foreign policies of the major European states from the beginning of World War I to the Cold War and the emergence of modern Europe.

Not open to students with credit in History 277

Cross listed as Political Studies 277

History 368ab The Young in Western Society 3-3-0

A course which examines the experience of children and youth in European and North American society from the late Middle Ages onwards. Among the topics to be discussed are changing notions of childhood and youth; the development of educational, welfare and "child-saving" systems; social, cultural and economic change and its impact on the young; and the role of youth in shaping the larger culture and society of the west.

History 370ab The Americas: A Comparative Colonial History 3-3-0

Examines the rise and fall of the great European empires in the Americas, with an emphasis on the process of implantation and growth of new societies. Topics to be examined include contact with Native peoples, demographic features of early colonial populations, slavery and colonial economies, the rise of colonial elites and their challenge to imperial authority.

History 371ab A History of Communications 3-3-0

Examines the evolution of different modes of communication from the advent of writing systems, through the printing press to the electronic media of the twentieth century. The focus of the course will be on the social, cultural and economic impact of communication revolutions.

History 373ab War and Canadian Society 3-3-0

An examination of the role of war in Canadian society and those factors which have influenced war and foreign policies. Some attention will be paid to the wars of the French regime, the War of 1812 and the Riel rebellions. The course will concentrate on the twentieth century: the South African War, the two world wars, Korea, and the role of Canadian diplomacy.

History 374ab Canada and the World in the 20th Century 3-3-0

Topics include Canada and imperialism, the two world wars, the development of Canadian foreign policy, the golden age of Canadian diplomacy, Canada and the League of Nations, and the United Nations.

History 378 War and Peace in the Middle East 3-3-0

This course will study the modern Middle East through the wars that have shaped so much of its recent history. Starting with Turkey's entry into the First World War in 1914, the course will examine the origins, events, consequences and peace arrangements of the major wars that have shaped the Middle East in the twentieth century, such as the two World Wars, the Arab-Israeli Wars, the Suez War, the Iran-Iraq War, and the two Gulf Wars. These conflicts provide a lens through which students can gain better insight into the personalities, forces, ideologies and geo-strategic factors that have determined the political map of the region over the last hundred years.

History 379ab Technology and Society in N.A. 1850 to Present 3-3-0

This course will focus on the development of technological systems in Canada and the U.S. in order to assess how technology shapes and is shaped by important political, economic and social events.

History 380ab Women in Modern British History 3-3-0

This course is a survey of the position, roles and experiences of British women from the era before the industrial Revolution to present times. The period under discussion is subdivided into a number of chronological sections, each of which is understood to have been moulded by a set of specific themes. Themes analyzed in the lectures and discussions include women in pre-and proto-industrial economy; women's work in industrial capitalism; women's education; the suffrage movement; women in the two World Wars, the labour movement, and in welfare campaigns.

History 381ab The Cold War in Global Context 3-3-0

This course will analyze the origins, course and consequences of the Cold War from the end of World War II to the collapse of the Berlin Wall. Among the topics to be studied are the ideological and geopolitical foundations of Soviet-American antagonism, the assumptions and objectives of each bloc, the emergence of the Third World and the impact of Cold War on its evolution, the building of non-alignment and neutrality as responses to a bipolarized world, and political/diplomatic competition and 'hot wars', in particular in Asia and Africa..

History 391ab Archival or Institutional Internship 3-3-0

Unpaid internship in a local archival repository or other institution under the joint supervision of an archivist or other representative and a member of faculty. Students will be evaluated on the completion of pre-established objectives and must be prepared to perform a variety of projects such as writing a major report, preparing an archival inventory or a finding aid. Students must obtain departmental approval before registering for the internship.

History 392 Research Internship 3-3-0

Unpaid internship under the supervision of a member of the department. The student will be responsible for undertaking research related activities in support of the research project of a faculty member.

SEMINARS

History 404 The Numbered Treaties 3-3-0

From 1871 until 1921, Canada entered into a series of treaties with many of the First Nations who occupied territory in what is now known as Ontario, the prairie provinces and some areas to the north. These treaties, numbered 1 to 11, formed the basis of the First Nations' relationship to the Canadian state. The scholarship on this relationship and on many other related points is divided and controversial. This course, through readings, seminar discussions and primary source materials, will explore the numbered treaties: their terms, the reasons for their negotiation, the expectations of the various parties, and the scholarly debates that surround their meaning and significance.

History 407ab Political History 3-3-0

In the past few decades, the "New Political History" has gone beyond the study of great men and embraced theoretical perspectives drawn from the humanities and social sciences. Drawing on examples from British, French, American and Canadian historiography this seminar will introduce students to the major schools that inform this vibrant and dynamic sub discipline.

History 412ab Colonial America 3-3-0

Examines through readings and seminar discussions, the social, economic, cultural and political development of the Anglo-American colonies to 1776. Topics to be covered include the formation of colonial societies, the creation of slave and free economies, religious and political thought in transition, and the Anglo-American colonies as part of the British empire.

History 413ab British North America 3-3-0

Examines the history of the British North American colonies from a regional and thematic perspective. Topics include economic growth in an imperial context, immigration, the rebellions in the Canadas, regional and ethnic identities, and relations with the United States.

History 414ab Environment and Society in North America 3-3-0

This course traces the relationship Canadians and Americans have had with their environment within a political, economic and intellectual context. Intertwined with this history will be First Nations' views and issues with respect to the land and natural resources.

History 415ab The American Civil War 3-3-0

A seminar course which will analyse both the cause of the conflict and its political, social, military and diplomatic consequences.

History 421ab The War in Vietnam 3-3-0
This course examines, through a series of seminars, the causes and events of the Vietnam War, its political and social impact on the United States, as well as its effects on international relations.

History 430a Gender and Sexuality in the Pre-Modern World 3-3-0
This seminar course examines both the construction and everyday practices of gender and sexuality before the rise of modern viewpoints and sensibilities on the subject. By looking at various cultural groups, discussions will focus on the legal, socio-economic and cultural processes that shaped pre-modern understandings of these changing concepts. Issues such as the role of women in society, gender identity, masculinity/femininity, and marginalized sexual or gender practices will be analyzed taking into account the development of different perspectives within the historical profession.

History 431ab Inquisitions, Law and Society 3-3-0
This seminar course focuses on the changing faces of inquisitorial practice, from the nascent medieval Inquisition and infamous characters like Bernard Gui to the modern papal version headed by Cardinal Ratzinger, not forgetting of course Torquemada's Spanish Inquisition and its less known Portuguese cousin. Relying on a thematic approach, the course will particularly examine the social and legal contexts of inquisitorial practice.

History 432 The Social History of Disease in the West 3-3-0
This seminar course will explore the construction of disease and its social and political repercussions by focusing on specific epidemics that have indelibly left their mark on the West. In particular, students will utilize primary sources within a corpus of historical literature to unravel the complex interactions brought about by epidemics such as the Black Death in Medieval Europe, Syphilis across the Early Modern World, Smallpox in the Americas, and most recently AIDS.

History 434ab Ideology and Revolution, 1789-1849 3-3-0
An examination of the emancipatory drives - democratic, liberal, socialist, feminist, nationalist - that defined Europe from the 1789 French Revolution to the mid-century revolutions which swept across the continent. The course explores the interplay of ideology and action, including revolutionary violence, to effect change and promote "progress".

History 436ab Europe: State and Society in Transition, 1500-1800 3-3-0
This seminar course examines the development of early modern European society by focusing on popular culture and the points of contact between this culture and literate culture, including the state. Topics include: the material conditions of life, the wars of religion, popular pastimes and plebeian morals.

History 437 International Relations from 1870 to the present 3-3-0
Since the end of the nineteenth century, the basis, nature and issues of international relations have profoundly changed. Through assigned readings and discussions, this seminar course will examine the evolution. Topics to be studied include the historiography of international relations, 'balance of power' system of the nineteenth century and its breakdown, the diplomatic history of the period of the world wars, the role of the UN, the Arab-Israeli conflict, the non-alignment movement, peace-keeping, and the rise of terrorism as a major international issue.

History 438b War and Society in Europe, 1914-1945 3-3-0
The first half of the 20th century in Europe was unprecedented in terms of the extent and intensity of war-related destruction and general social turmoil. Through assigned readings and discussions, this seminar course examines the causes and the impact of violent conflict in this period.

History 445ab Britain in the First World War 3-3-0
A seminar course which examines the impact of World War I on the politics, society, culture and economy of Britain. Topics to be studied include military strategy, political leadership and party alignments, conscription and the war economy, labour and the war, the changing roles and experiences of women, the trenches and the trench experience, and the growth and ebb of government intervention.

History 446ab Industrialization and Society: Britain 1760-1850 3-3-0
This seminar course will concentrate on the causes and consequences of the Industrial Revolution in the place of its birth. Topics to be examined include the economic and social origins of the Industrial Revolution and changing role of the State; the emergence of class and of popular politics; the formation of modern ideologies, such as liberalism, classical economics, utilitarianism and early socialism; and the effects of industrialization on work, culture and the family.

History 449ab The English Family from the Black Death to the Present 3-3-0
A seminar course which focuses on the evolution of the family from the late Middle Ages to the era of mature industrialism. Theoretical and historiographical approaches to the western family will be combined with an empirical investigation of such issues as gender and age relations, demographics, domestic ideologies and the place of the family in wider economic, social and political structures.

History 450ab Public History 3-3-0
This course is designed to introduce students to both the theory and practice of public history by examining sources from both Canada and the United States. By focusing on the origins and current issues of the field and by highlighting certain public history domains such as government consulting, museums and heritage sites, and the media, students will learn about information management, the demands of the client-contractor relationship and the ethical issues and controversies which make public history exciting and challenging.

History 455 Public History Practicum 3-3-0
A directed independent study in which the student undertakes historical work in one of a range of institutions or agencies.

History 462ab French-Canadian Nationalism 3-3-0
Examines, through a series of seminars, the thought of a number of important French-Canadian nationalists and that of their critics.

HONOURS PROJECT

History 490a Honours Research Proposal 3-0-0
The preparatory stage of an individual specialized research project on a topic chosen by the student under the supervision of a member of the Department. The student will develop a research proposal which will define a viable topic and present a detailed plan of research. This will include a detailed discussion of the objectives and parameters of the proposed research, an explanation of the theoretical and methodological approaches to be taken and an historiographical overview of the relevant literature. It will also include a description and preliminary analysis of the appropriate primary and secondary sources, a bibliography and a comprehensive proposed structure for the subsequent thesis. The research plan will be assessed by a panel of three members of the Department during the final weeks of the semester.

History 491a Honours Thesis 3-0-0
Continuation of HIS 490a. The student will complete the research agenda detailed in HIS 490, and present the findings in the form of a thesis no later than two weeks before the marks deadline. The thesis should be modeled upon a learned article. It should be no more than 10000 words: quality of analysis and conceptual rigour will outweigh exhaustive treatment of the subject. An oral examination will be required, and the thesis will be assessed by the panel of the preceding course.

Prerequisite: HIS 490a

INDEPENDENT STUDIES

History 286a Independent Studies for U2 Students
History 287b Independent Studies for U2 Students
History 386a Independent Studies for U3 Students
History 387b Independent Studies for U3 Students

COGNATE COURSES

Classics: 120ab, 209a, 210b, 260b.

Politics: Cognate courses must be selected in consultation with the Chair prior to registration in the course.

Psychology: 342a, 443b.

Religion: 256a, 257b.

Sociology: 207b.

Students in the Major or Honours program may count a maximum of 12 credits in cognate courses toward the degree. Students in the Minor program may count a maximum of 6 credits in cognate courses toward the degree.

Liberal Arts

Program Structure

The Liberal Arts Program offers Major and Honours Programs, both of which are structured to accommodate students wishing to combine studies in Liberal Arts with studies in other programs. The Major in Liberal Arts consists in a 9-credit Liberal Arts Core Curriculum and 57 credits of Required Courses. Of these required credits at least 12 credits must be drawn from the Liberal Arts Foundation Courses (LIB210-216), 3 from the First Year Seminar (Lib100), which is required for all first year Liberal Arts majors, and a further 3 from the final year Interdisciplinary Seminar (LIB300). The Honours in Liberal Arts requires 12 credits beyond the Major, including a 6-credit interdisciplinary Honours Thesis.

Double Majors, Concentrations and Minors

Since Liberal Arts is a flexible and interdisciplinary program we encourage students to do double majors (normally 48 credits), concentrations (36 credits) and minors (24 credits) in other disciplines. Many courses can count towards both your Liberal Arts major and your major, concentration or minor in another discipline.

Concentrations within Liberal Arts have been designed for study in philosophy, classics, religious studies and art history. Please see these departments for concentration requirements.

The Liberal Arts Major

A. Liberal Arts Core Curriculum

It is strongly advised that the Core Curriculum be completed in the first year of study.

Imaginative Literature Component:

3 credits chosen from the following:

- CLA 212 Classical Mythology I
- DRA 102 Introduction to Theatre
- ENG 112 English Literary Tradition I
- ENG 113 English Literary Tradition II

Historical/Philosophical/Religious Component:

3 credits chosen from the following:

- CLA 209 The History of Ancient Greece I
- OR
- CLA 210 The History of Ancient Greece II
- HIS 104 The Development of the West
- PHI 1xx Any introductory Philosophy course
- REL 100 Introduction to Religion

Fine and Performing Arts Component:

3 credits chosen from the following:

- CLA 205 Greek Art and Architecture
- CLA 208 Art and Architecture of Imperial Rome
- FIH 102, formerly FIN 102 Survey of Western Art II
- MUS 110 The Art of Listening

B. Required Courses

First Year Seminar Course

First year Liberal Arts majors enroll in this course in their first semester at Bishop's, or the first time it is offered after they become a Liberal Arts Major.

LIB 100a Introduction to the Study of Western Culture 3-3-1
By means of a study of classic texts in the Western cultural tradition this class develops foundational skills in interdisciplinary education, reading, writing, conversation and seminar presentation.

2. Liberal Arts Foundation Courses

Normally Liberal Arts students are enrolled in one Liberal Arts Foundation Course in each semester of their degree. Majors must complete at least 12 Foundation Course Credits. Each course has a "culture" component that requires students to attend and discuss a selection of plays, musical performances, art exhibitions, or lectures each semester.

Lib 210 Eros, Love and Desire 3-3-0
When Plato wrote that *eros* is "giving birth in beauty" he sparked a debate that has lasted millennia. Does the erotic lead us upwards toward wisdom, truth and love of thy neighbour? Or is eros the chaotic, anti-social and even destructive force of Dionysian rapture? This course will explore these and other classic theories of eros, love and desire.

Lib 211 Empire and its Enemies 3-3-0
"The sun never sets in my empire" said Spanish King Carlos I in the 16th century—a phrase then adopted by the British to signal not only the planetary breadth of their imperial achievement, but also the divine, solar blessing conferred on their conquests by God. What is this imperial aspiration, the desire to dominate? Why is Western history in a sense the history of empires constructed and empires resisted and destroyed? This course will trace the imperial aspiration and its enemies from the Roman city-state, to the British nation-state to the eclipse of the state altogether by the modern capitalist corporation. It will analyze the various forms and modes of dominance and resistance up to and including the non-state actors of today.

Lib 212 In Search of Justice 3-3-0
"Let justice roll down like water, and righteousness like an ever flowing stream." So cried the prophet Amos, echoed thousands of years later when Martin Luther King insisted that "Power at its best is love implementing the demands of justice!" This course will explore the changing and always contested meaning of justice in its many forms in Western history. Is justice little more than the ancient Greek claim that one should "do good to one's friends, and harm to one's enemies"? Or is there a universal form of justice that recognizes civil rights and social justice for the poor, women, racial and ethnic minorities, gays and lesbians and other marginalized peoples?

Lib 213 The Use and Abuse of Beauty 3-3-0
French writer Stendhal said in the 19th century that "beauty is the promise of happiness" and upon seeing the beauty of Florence he wondrously proclaimed, "I was in a sort of ecstasy... absorbed in the contemplation of sublime beauty ... Everything spoke so vividly to my soul." Yet only decades later his compatriot, poet Paul Rimbaud, claimed that he wanted to "abuse" beauty, for he found her "bitter." Dadaist and surrealist artist Tristan Tzara went even further, "I have a mad and starry desire to assassinate beauty..." Does Tzara signal not only a dramatic change in Western art, but the claim that all forms of harmony and beauty, including the personal and the political, are conservative. Or is the beautiful in some important sense still of what we might call "transcendent" importance to human life? This course will explore the fate of the beautiful, from the Greeks to 21st century life.

Lib 214 The Human Will and Nature 3-3-0
The ecological crisis facing humanity today is not, German philosopher Martin Heidegger would claim, merely the product of recent economic productivity nor can we solve it with yet more technology. It is the product of a "will to mastery" that has obsessed our culture, he claims, since the Greeks. Heidegger ominously warns that this "will to mastery becomes all the more urgent the more technology threatens to slip from human control." This course will explore ideas for and against claims like those of Heidegger and in so doing address the global ecological turning point we appear to face.

Lib 215 Ecstasy and Excess 3-3-0
 “Joy is the most comprehensive mind...and it is from the summits of joy alone that each one will see the path to take.” American philosopher Alphonso Lingis claims here that humanity is the “ecstatic” species. In Greek the ek-static means literally to be outside, even beyond oneself—to transcend what and who one is. In the last few hundred years artists, writers, philosophers and others have claimed that ecstasy and excess are not merely temporary states, but the very condition of human life. This course will explore a variety of theories, from the biological to the philosophical and the virtual, inspired by the idea that there is no “human nature” that we can’t exceed.

Lib216 The Divine and Ultimate Concern 3-3-0
 The divine is that about which we are “ultimately concerned”—so said theologian Paul Tillich of Union Seminary in New York. Is this just a last-ditch attempt to salvage faith and spirituality in the midst of charges that religion is, at best, an “opiate of the masses” (Marx) and, at worst, “patently infantile” (Freud)? Or again, is the role of religion being taken over by its long time sister in spirit—art? This course will explore the troubled and passionate place of religious experience and the aesthetic in Western civilization.

3. Liberal Arts Thematic Seminar Courses

These courses are in-depth, interdisciplinary seminar courses on topics relevant to the program of study of Liberal Arts majors. Instructors and topics are determined each year. These courses count for “Humanities Breadth/Depth Requirements” as appropriate. See Section 8 below.

LIB 250	Thematic Seminar I	3-3-0
LIB 251	Thematic Seminar II	3-3-0
LIB 350	Thematic Seminar III	3-3-0
LIB 351	Thematic Seminar IV	3-3-0

Pre-requisite: At least one of Lib201-206 or permission of the instructor.

4.

LIB 300ab Interdisciplinary Seminar 3-3-0
 A team-taught seminar which will explore a selected theme of interdisciplinary interest.

5. Language Requirement

At least 9 credits in the declared second language of the student.

6. Social Sciences Requirement

At least 12 credits in the Social Sciences and/or Department of Economics. Six of these credits must be at the level of 200 or above.

7. Natural Sciences/Mathematics Requirement

At least 3 credits from the Natural Sciences or Mathematics

8. Humanities Breadth/Depth Requirements

At least 15 credits in the Division of Humanities at the 200 level or higher, at least 6 credits of which must be at the 300 level or higher. Moreover, at least three credits of these must be taken from each of the following areas:

1. Drama, Fine Arts, Music
2. Classics, History, Philosophy, Religion
3. English, French, German, Italian, Spanish

The Liberal Arts Honours Degree

The Liberal Arts Honours student must meet all the requirements of the major, plus 12 further credits. Of these 3 must be obtained in courses at the 200 level or higher with the Division of Humanities or Social Science and 3 must be obtained in the completion of a fifth Foundation Course (for a total of 15 Foundation Course Credits). The

remaining six credits must be obtained in an Honours Thesis of an interdisciplinary nature. In keeping with Divisional regulations, a 70% average, calculated on the best 60 credits in the program, would be necessary for graduation with an Honours degree.

LIB400f Honours Thesis 6-3-0
 An individual research project of an interdisciplinary nature, chosen by the student in consultation with one of the members of the Program Committee, who shall act as the thesis supervisor. The thesis will be assessed by a committee composed of the thesis supervisor and one other member of faculty.

Program Director:

Bruce Gilbert, Department of Philosophy

Program Committee:

Jean Manore, Department of History

Jack Eby, Department of Music

George Rideout, Department of Drama

Dale Stout, Department of Psychology

MODERN LANGUAGES

The Department of Modern Languages offers Majors in Modern Languages and Hispanic Studies, as well as Minors in English Language Studies, German Studies, Hispanic Studies, Italian Studies, and Japanese Studies.

The **Major in Modern Languages** consists of 60 credits equally distributed (30/30) between two languages which will be specified on the student’s final transcript. The languages are English, French (offered by the Département des études françaises et québécoises), German, Italian, and Spanish. The requirements and courses for the Major in Modern Languages are listed under each specific language.

* Please note:

1) *Students registered in the Major in Modern Languages must declare the two languages in which they are concentrating by the end of their first year.*

2) *Students enrolled in either the Major in Modern Languages or the Major in Hispanic Studies must successfully complete the Information Literacy laboratory course (ILT102ab). This one-credit laboratory course must be taken in conjunction with a research-based course (normally third-year course) in the Department of Modern Languages.*

3) *Students enrolled in a Minor program in the Department of Modern Languages are strongly recommended to take the Information Literacy laboratory course.*

4) *Unless otherwise stated, all courses will be taught in the language specified in the course title.*

Modern Languages Major:

International Japanese Studies Component

Students who have been accepted to go on exchange in Japan may apply for the International Japanese Studies component of the Major in Modern Languages.

This component consists of 30 credits in Japanese; courses are chosen prior to the exchange in consultation with the Head of the Japanese Studies section.

The **Certificate in Modern Languages** is designed to provide part-time students with a working knowledge of at least two of the modern languages taught at Bishop's University: English, French, German, Italian, Japanese, and/or Spanish.

Students must complete a total of 10 courses (30 credits). They choose two main languages of concentration and complete at least 12 credits in each. The 6 remaining credits may be taken in either of these two main languages, or in one other language. Please consult course offerings under individual languages within the Department of Modern Languages, the Department of English and the Département des études françaises et québécoises.

Credits obtained in the certificate program may be applied towards a degree program in Modern Languages; however, students may not be enrolled simultaneously in a degree program and in the Certificate in Modern Languages.

Admission requirements: *See Regulations for Certificate Programs.*

MLA Courses

MLA (Modern Languages) courses are offered by the Department of Modern Languages through the collaboration of the different language sections. These courses may be taken as free electives or as part of the Humanities Divisional Requirement.

MLA 201ab Introduction to Linguistics 3-3-0

This course will introduce student to the core areas of linguistics: phonetics, phonology, morphology, syntax, semantics, and pragmatics. It will provide an overview of different properties of languages and will examine different linguistic theories, including the concept of a universal grammar. Another objective will be to explore, through an examination of such fields as psycholinguistics and sociolinguistics, the ways in which language reflects mind and society. This course will be taught primarily in English.

MLA 211ab Currents in World Literature 3-3-0

This team-taught course introduces students to great works of modern and post-modern literature from Europe, Latin America, and Asia. The scope of the course is broad and cross-national and may include such themes as the search for identity, the persona of the artist, notions of love and gender, the search for meaning, and others. Students will learn both to appreciate the uniqueness of a literary work, to situate it in its historical and cultural context, and to make associative connections between literary works across national boundaries and historical periods. Authors may include Borges, Camus, Dostoevsky, Kafka, Pirandello, Mishima, and others. This course will be taught in English.

English Language Studies

The English Language Section of the Modern Languages Department offers courses in composition, oral expression, and English as a second language. All courses have in common the aim of assisting students in all disciplines to improve their understanding of English language and communication.

English Composition and Speech

General Information

Intended for students who have already demonstrated proficiency in English, courses designated ELA (English Language) may be taken as free electives in any program. ELA 116: Effective Writing (or, alternatively, a course in English literature) is recommended for first-year students in the Division of Natural Sciences and Mathematics, but ELA 116 is open to all students who wish to improve their written communication.

ELA 116, ELA 201 and ELA 202 may be taken by **advanced** level ESL students as part of a Major in Modern Languages, a Minor in English Language Studies, or a Certificate of Proficiency in English as a Second Language.

Please note that no ELA courses may be counted towards an honours, major, or minor in English Literature.

Course descriptions

ELA 116ab Effective Writing 3-3-0

This course is designed for students who have already achieved a basic competence in writing. Students will read a variety of texts of different genres so as to become familiar with various types of academic and professional discourse. Students will be encouraged to analyse writing strategies, content, organization, and style with a view to improving their overall writing abilities. Students will also be made aware of different writing situations, particularly those that may arise in their own disciplines. Required texts normally include a grammar handbook and a book or collection of readings.

Prerequisite: Students are normally expected to have achieved a result of at least "3-" on the EWP Exemption Credit Examination before they attempt ELA 116. Students who need a course in basic writing are encouraged to register in the course *English Writing Proficiency* (EWP 099).

ELA 201 Applied Communications and Rhetoric 3-3-0

Practical writing course focusing on advanced projects in a chosen field. Students will assemble a portfolio of writings related to a particular discipline or professional environment. Topics will include genre and style, audience analysis. Students will research on and write in discipline-specific genres, contribute to a web-based magazine/journal, and produce other web publications (brochures, press releases, newsletters, etc.)

ELA 202 Speech 3-3-0

This course aims at improving students' oral communication in academic and professional situations while instilling an appreciation for the tradition of rhetoric and the varieties of spoken genres. Students will analyse famous speeches, debates, and other forms of oral discourse in order to appreciate logic, structure, rhetorical strategies, and other aspects of presentation. Students will be required to make several major and minor oral presentations which will be closely evaluated through the use of audio and/or video recordings (at the discretion of the instructor). Projects may include group discussions on current issues, symposia, debates, impromptu and extemporaneous speaking. Because of the intensive nature of the presentations and associated evaluation, student numbers will be limited.

Offered in alternating years (see current schedule).

English as a Second Language

English as a second language courses at the 100 and 200 level may be taken as free electives in any program, or they may be taken towards a Major in Modern Languages (English Language Studies Component), a Minor in English Language Studies, or a Certificate of Proficiency in English as a Second Language. (For more information, consult "Certificate Programs in Continuing Education: Certificate of Proficiency in English as a Second Language/Intensive English Language Studies".)

Major in Modern Languages: English Language Studies Component

Minor in English Language Studies

In order to be accepted into these programs, students must have attained at least an intermediate level of competence in English. This level will be established according to the following criteria:

- 1) A result of over 40% on the Bishop's University E.S.L. placement test.
and
- 2) Successful completion of two CEGEP English Courses at the 604-100 level (normally 604-101 & 604-102).
or
- 3) A result of 480/157-525/206 on the TOEFL test.
or
- 4) A result of 575-690 on the TOEIC test.
or
- 5) A result of 4.5-5.5 on the IELTS test.

Students may also enter the Major/Minor Programs at the advanced level, which will be defined according to the following criteria:

- 1) A result of over 65% on the Bishop's University ESL placement test.
and
- 2) Successful completion of two Cegep English courses at the 604-100 level, including Anglais 604-102 and 604-103, with an average of over 75% in each.
or
- 3) A result of over 525/206 on the TOEFL test.
or
- 4) A result of over 690 on the TOEIC test.
or
- 5) A result of over 5.5 on the IELTS test.

These criteria will be subject to periodic revision by the Modern Languages Department. Please inquire at the Admissions Office for current requirements.

In all cases, the University's standards will prevail. The University reserves the right to deny admission into these courses and programs to students who are already proficient in English. The University also reserves the right to reassign students to different levels/courses/programs should in-class performance be inappropriate for the level of instruction. Students who have completed a university program with English as the language of instruction will not normally be eligible for English Language Studies programs or ESL courses.

Course Groupings for Modern Languages Major (English Language Component) and Minor in English Language

Group I: Core Courses

ESL 102: Beginners English as a Second Language II
 ESL 103: Intermediate English as a Second Language I
 ESL 104: Intermediate English as a Second Language II
 ESL 110: Introduction to English for Academic Purposes I
 ESL 111: Introduction to English for Academic Purposes II
 ESL 210: Advanced Writing and Text Analysis
 ESL 211: Advanced Communicative Skills I

Group II: Special Purposes/Special Focus Courses

ESL 121: English Grammar I: Tense and Idiom
 ESL 122: English Grammar II: Tense/Stylistic and Text Analysis
 ESL 125: English Phonetics and Pronunciation
 ESL 126: Oral Discourse I
 ESL 127: Oral Discourse II
 ESL 131: Business English
 ESL 133: English for Technology
 ESL 212: Advanced Communicative Skills II

Group III: Writing, Literature, Translation Courses

ELA 116: Effective Writing
 ELA 201: Applied Communications and Rhetoric
 ELA 202: Speech
 ENG 104: Approaches to Short Fiction
 ENG 105: Approaches to Poetry
 ENG 108: The American Short Story
 ENG 110: English Writers of Quebec
 ENG 111: Canadian Short Story

ENG 202: History of the English Language

FRA 301: Stylistique et traduction I

FRA 302: Stylistique et traduction II

NB: Any English Literature (ENG) course may count towards the Group III requirements, although we recommend first-year courses, in particular ENG 104, ENG 108, ENG 110, ENG 111. With the permission of the Modern Languages Department, very advanced ESL students may substitute ENG courses for one or more of their Group II requirements.

Major in Modern Languages: English Language Studies Component Requirements

All students undertaking the English Language Studies Component of the Major in Modern Languages must complete 30 credits from course groups I, II, and III.

Intermediate Level Students:

Students entering at the intermediate level must complete four of the courses (12 credits) in Group I; including ESL 210 and ESL 211; three courses (9 credits) in Group II; and three courses (9 credits) in Group III, including ELA 116: Effective Writing.

Advanced Level Students:

Students entering at the advanced level must complete ESL 210 and ESL 211 (6 credits) in Group I; four courses (12 credits) from Group II; and four courses (12 credits) from Group III, including ELA 116: Effective Writing. NB: FRA 301 or 302 may be taken only by those students who are combining the English Language Studies and the French components of the Major in Modern Languages, and these courses may be counted only once towards the Major.

Minor in English Language Studies

Requirements

Students undertaking a Minor in English Language Studies must complete either 30 credits (if they enter at the intermediate level) or 24 credits (if they enter at the advanced level) according to the following stipulations.

Intermediate Level Students:

Students entering at the intermediate level must take four of the core courses (12 credits) in Group I including ESL 210 and ESL 211; (NB: Results of over 65% must be achieved in ESL 103, ESL 104, ESL 110 or 111 before students may take ESL 210 and 211).

Advanced Level Students:

Students entering at the advanced level must take ESL 210 and 211 (6 credits) in Group I.

All students must complete four courses (12 credits) from Group II and two courses (6 credits) from Group III, including ELA 116: Effective Writing. (NB: For other courses in group III, permission may be required from the Chair of the appropriate department).

Certificate of Proficiency in English as a Second Language/Intensive English Language Studies

Since 1977 students from Quebec and around the world have benefited from the opportunity to learn English as a second language on Bishop's campus. The Certificate of Proficiency in English as a Second Language may be pursued part- or full-time in the English Language Studies program and it comprises a sequence of courses in English as a Second Language, English Language and Composition, and/or English Literature.

Students who complete the Certificate will have attained a level at which they are capable of taking university courses in English, in addition to being able to use English comfortably on the job and in their leisure activities.

Admissions requirements:

Students at all levels may register for the certificate program; however, students must normally have reached an intermediate level of competence before being admitted to full-time status.

Please note: *Students entering certificate/intensive studies at the beginning or intermediate level may not be able to complete all program requirements in two regular sessions.*

Certificate Requirements

10 courses according to the following regulations and a cumulative average of 65% in courses taken towards the Certificate.

Group I

The following six courses are required (depending upon the level of entry into the program):

ESL 70ab	English Second Language: Beginners I	3-3-0 EXT
ESL 102ab	Beginners English as a Second Language II	3-3-0
ESL 103ab	Intermediate English as a Second Language I	3-3-0
ESL 104ab	Intermediate English as a Second Language II	3-3-0
<i>Note: ESL 110 and 111 (Introduction to English for Academic Purposes I and II) may be substituted for ESL 103 and 104.</i>		
ESL 210	Advanced Writing and Text Analysis	3-3-0
ESL 211	Advanced Communicative Skills I	3-3-0

Following the result obtained in the Bishop's University ESL placement test, students may be exempted from some or all of the following courses: ESL 070ab, ESL 102ab, ESL 103ab, ESL 104ab. To replace these exemptions, students may choose courses from group III.

All students in the Program must complete ESL 210 and 211.

Group II

A minimum of three courses **must be chosen from the following:**

ESL 121	English Grammar I: Tense and Idiom	3-3-0
ESL 122	English Grammar II: Tense/Stylistic and Text Analysis	3-3-0
ESL 125	English Phonetics and Pronunciation	3-3-0
ESL 126	Oral Discourse I	3-3-0
ESL 127	Oral Discourse II	3-3-0
ESL 131	Business English	3-3-0
ESL 212	Advanced Communicative Skills II	3-3-0

Group III

At least one course **must be chosen from the following:**

ELA 116	Effective Writing	3-3-0
ELA 201	Applied Communications and Rhetoric	3-3-0
ELA 202	Speech	3-3-0

Any course with an ENG code.

English as a Second Language: Course Descriptions

Extra-Degree Credit Course

The following course is offered through the Office of Continuing Education in the evening and during the summer for extra-degree credit. **THIS COURSE MAY NOT BE COUNTED TOWARDS DEGREE REQUIREMENTS.**

ESL 70ab Beginners I 3-3-0 (extra-degree credit)

Students entering this level have had a limited exposure to the language and have little or no ability to communicate. The purpose of the course is to provide students with a knowledge of the basic sounds and structures of the language along with a confidence which will permit them to begin to have meaningful exchanges in the English-speaking world. Through various communicative activities and exercises in grammar and pronunciation, students develop basic listening and speaking skills. At this level, reading and writing are used primarily to assist in the acquisition of the structures of the language. Upon completion of this course students should be able to understand and respond to communication of a simple, specific nature.

Entry level: 0% to 28% on the placement test

Full-Credit ESL Courses

The following courses are offered both by the Office of Continuing Education (in the evening, summer and in various intensive programs) and by the Department of Modern Languages (English Language Section) in the regular day programs.

ESL 102ab Beginners English as a Second Language II 3-3-0

This course is intended for students who have already been exposed to the language, have a rudimentary understanding of its sounds and structures, and are able to communicate basic messages. The emphasis is on understanding and speaking, while students begin to participate actively in communication exercises and activities. Students are also introduced to simple reading and writing activities. Upon completion of this course, students should be able to function in a variety of real-life situations, and they should have a good knowledge of the basic structures of the language.

Prerequisites: 29% to 40% on the Bishop's ESL placement test or 65% or over in ESL 070.

ESL 103ab Intermediate English as a Second Language I 3-3-0

This course is for students who are able to communicate yet need additional exposure to the basic structures and functions of the language. Students participate in speaking, listening, reading, and writing activities which demand increasing independence and concentration. Upon completion of this level, students should be able to produce simple, clear written texts and convey a desired oral message in a variety of social, occupational, and educational contexts. They should also have developed an awareness of some of the more complicated structures of the language.

Prerequisites: 41%-52% on the placement test or 65% or over in ESL 102

ESL 104ab Intermediate English as a Second Language II 3-3-0

This course is for students who are able to communicate with confidence in a variety of situations yet wish to improve their knowledge of and proficiency in the more complicated structures and functions of the language. Basic structures are reviewed at this level, but the main emphasis is on introducing students to more unusual grammatical and idiomatic structures and to more complex tasks and materials. Students are exposed to a greater variety of reading sources and are required to write texts with increasing accuracy. Upon completion of this level students should be able to engage in extended discourse in a variety of social, occupational, and educational contexts.

Prerequisites: 53%-65% on the placement test or 65% or over in ESL 103

ESL 110ab Introduction to English for Academic Purposes I 3-3-0

This is a broadly focused course designed to familiarize students with the varieties of English that they will encounter in an academic milieu, and give practice in the skills that are essential to this milieu: comprehending lectures, reading texts of varying length and complexity, note-taking, summarizing, paraphrasing, presenting brief seminars. In addition, students will write and revise short texts with the aim of improving their command of grammar and vocabulary.

Entry level: 41%-52% on the placement test.

ESL 111ab Introduction to English for Academic Purposes II 3-3-0

This course is a continuation of Introduction to English for Academic Purposes I. Students will continue to be exposed to a wide variety of materials and will continue to improve in the four main skill areas: listening, speaking, reading, and writing. However, the emphasis at this level will be placed on activities of increasing complexity which require a greater degree of autonomy.

Pre- or corequisites: 53%-65% on the placement test, 65% in ESL 110ab, may be taken concurrently with ESL 110ab.

ESL 110ab and 111ab will typically be offered as part of an intensive program. Thus, they may require participation in various extracurricular activities. For example, students may be required to use the Media-Assisted Language Learning Centre, participate in intensive conversation groups, audit courses, attend presentations and other academically oriented functions, and submit reports, at the discretion of the instructor.

The passing grade for these courses is 50%; however, students will not be permitted to take advanced core courses until they have demonstrated adequate ability through achieving 65% or over in at least two 100-level ESL courses.

ESL 121ab English Grammar: Tense and Idiom 3-3-0

This course provides a comprehensive review of the basic tense systems in English, while focusing on grammar at the phrase and sentence level. Presentation of grammatical material will be contextualized and reinforced by oral and written exercises. Students will also learn phrasal verbs and various idiomatic features of the language (prepositions, gerund and infinitive collocations, article use).

Prerequisite: Over 40% on placement test

ESL 122ab Advanced English Grammar: Tense, Stylistic and Text Analysis 3-3-0

This course provides an examination of more complex aspects of English grammar (particularly tense), and the features of the language which contribute to text coherence. In addition, students will develop an understanding of the factors that influence style and structure in written texts, and register in spoken texts. They will also learn to employ different reading strategies to suit various texts and rhetorical situations.

Prerequisite: Over 40% on placement test

ESL 125ab English Phonetics and Pronunciation 3-3-0

This course is designed to provide students with an in-depth knowledge of the stress, rhythm and intonation patterns of English. In doing so, it will assist students in their understanding of variations in formal and informal spoken English, and in improving the accuracy of their spoken language. Students will learn the International Phonetic Alphabet, and will be given extensive aural/oral exercises involving cassettes and/or CD-ROMS in the Media-Assisted Language Learning Centre.

Prerequisite: Over 40% on placement test

ESL 126ab Oral Discourse I 3-3-0

In this course students will encounter different types of oral discourse and learn the organizational and presentation strategies necessary for effective oral communication. Although some emphasis will be placed on oral comprehension, most of the activities will provide students with practice in direct address before a group with special emphasis on effective organization of ideas and clear delivery.

Prerequisite: Over 40% on placement test

ESL 127ab Oral Discourse II 3-3-0

This course continues to focus on the objectives of Oral Discourse I. However, at this level students will be exposed to texts of greater complexity, and there will be an increasing emphasis on more demanding rhetorical situations. Students will analyse speeches, engage in debates and impromptu and extemporaneous presentations. Students will also carry out research on current issues and engage in related discussions.

Prerequisite: Over 40% on placement test

ESL 131ab Business English 3-3-0

This course will focus on improving business communication skills. Objectives will include the effective writing of e-mail correspondence, memos, business letters, and reports; effective oral communication in various settings on the telephone, in meetings, in debates and discussions. Students will also encounter videos, readings and discussions dealing with topics such as customer services, leadership, stress management, sexual harassment.

Prerequisite: Over 40% on placement test

ESL 210ab Advanced Writing and Text Analysis 3-3-0

This course is intended for students who have reached an advanced level of competence. Students will read a variety of texts from popular and academic sources and analyse them for grammar, structure, and rhetorical strategies. Students will also learn the conventions of the academic essay and the characteristics of English style and discourse.

Prerequisites: 66% or over on placement test; 65% or over in ESL 111a; or permission of instructor

ESL 211ab Advanced Communicative Skills I 3-3-0

This course is intended for students who have reached an advanced level of competence. Emphasis will be placed on familiarizing students with more complex aspects of grammar and communication, increasing vocabulary and knowledge of different text types, and improving listening and reading comprehension. At the end of this level students should be able to function comfortably in any anglophone environment, whether social, professional, or academic. There will continue to be a substantial writing component at this level. This may take the form of essays, reports or other assignments, at the discretion of the instructor.

Prerequisites: 66% or over on placement test; 65% or over in ESL 111; or permission of instructor.

ESL 212 Advanced Communicative Skills II 3-3-0

This course is a continuation of ESL211 in its approach, focusing on further developing the four language skills: speaking, listening, reading and writing. Additional and more complex grammatical forms will be examined, particularly those which are common in everyday speech and writing but which often prove problematic for even advanced speakers of English as a second language. As with ESL211, practice will take place in a communicative environment. The reading and listening content of ESL212 will focus on English Canadian popular culture, with the intention of providing an introduction to this culture for francophone Quebecers, exchange students and new Canadians. There will continue to be an extensive writing component at this level.

German Studies

Major in Modern Languages

The German Studies component of the Major in Modern Languages consists of 30 credits with a minimum of 12 credits of 300 level courses, including at least 6 credits in 300 level **literature and civilization** courses.

International Major in German Studies

The International Major in German Studies requires the completion of 42 credits in German, 24 of which must be at the advanced level (equivalent to 300 level) and drawn from courses in language, literature, culture, society, or civilization. With departmental approval, some of these courses may be double-counted for another programme concentration.

This program requires the completion of German course credits abroad and is accessible only to students who have been formally approved for exchange or who have completed equivalent German 300 level courses on a letter of permission. Students should apply for acceptance to this programme before going on exchange, and they should consult with the Chair of the German Studies Section regarding the selection of appropriate exchange courses.

Minor in German Studies

The Minor in German Studies consists of 24 credits.

Please note:

- (1) Majors in Modern Languages with the German Studies component and Minors in German Studies must take GER 203a Intermediate German: Topics and Texts I concurrently with GER 201a Intermediate German Language I, and GER 204a Intermediate German: Topics and Texts II concurrently with GER 202b Intermediate German Language II.
- (2) Students registered in the Major in Modern Languages with the German Studies component or the Minor in German may take a maximum of one course taught in English (GER 235ab Introduction to German Literature or GER 250ab German Civilization and Culture). These students will be required to hand in their written assignments in German.

The German Studies Section offers courses in the following categories: Language, Literature and Civilization, and Independent Studies. Please note that Independent Study courses are only offered to students with high academic standing. Third-year course offerings will vary regularly over a three-year cycle. Unless otherwise stated, courses are taught in German.

In addition to their degree requirements, students are strongly encouraged to sit one of the exams supervised by the Goethe-Institut Montreal. These proficiency exams test three different levels of the German language and give students the opportunity to obtain an internationally recognized certificate (*Zertifikat Deutsch, Zentrale Mittelstufenprüfung*, or *Zentrale Oberstufenprüfung*).

Language Courses

German 100ab Introductory German Language I-II: Intensive Course 6-6-2

This course covers the contents of German 101a and German 102b in one semester.

No prerequisite

German 101a Introductory German Language I 3-3-1

This course provides students with a sound basis for learning German as it is used in spoken and written communication today within the context of German-speaking culture. It also familiarizes students with contemporary life and culture in German-speaking countries. Language laboratory exercises are included.

No prerequisite

German 102b Introductory German Language II 3-3-1

Continuation of German 101a. This course offers systematic practice in the four language skills of listening, speaking, reading, and writing. It also provides a firm foundation in the basic elements of German grammar. Language laboratory exercises are included.

Prerequisite: German 101a or equivalent

German 201a Intermediate German Language I 3-3-1

This course is designed to increase students' ability to function in German. It offers a comprehensive review of German grammar through written and oral assignments. Authentic cultural texts and video activities, as well as the systematic development of vocabulary, help students further develop their communicative skills. Language laboratory exercises are included.

Prerequisite: German 102b or equivalent

German 202b Intermediate German Language II 3-3-1

Continuation of German 201a. Further emphasis on active vocabulary building and grammar review. Language laboratory exercises are included.

Prerequisite: German 201a or equivalent

German 203a Intermediate German: Topics and Texts I 3-3-0

The purpose of this course is to provide students with an authentic context for the assimilation of vocabulary and culture necessary for oral and written communication. Methodology includes the use of dialogues, journalistic and literary texts, video and audio material on specific topics relevant to the German-speaking world.

Prerequisite: German 102b or equivalent

Co-requisite: German 201a

German 204b Intermediate German: Topics and Texts II 3-3-0

Continuation of German 203a. Further emphasis on written assignments and speaking activities such as small group discussions and oral reports.

Prerequisites: German 201a and German 203a or equivalent

Co-requisite: German 202b

German 301a Advanced German Language: Styles and Structures I 3-3-0

This course provides students with an intensive review of German grammar through written assignments and oral presentations. Reading and discussing literary and cultural texts will help students appreciate the finer nuances of the German language and the specific stylistic qualities and cultural implications of representative prose.

Prerequisites: German 202b and 204b or equivalent

German 302b Advanced German Language: Styles and Structures II 3-3-0

Continuation of German 301a. Further development of communicative strategies; emphasis on complex grammatical and idiomatic structures.

Prerequisite: German 301a or equivalent

German 303a Advanced German Language: Topics and Texts I 3-3-0

Conversation and writing activities based on a variety of reading materials such as short stories, poems, current events, detective novels. Video, film, and the Internet provide further topics for discussion. Authors may include Dürrenmatt, Schlink, Dörrie, Noll, Arjouni and others. There will also be a review of complex grammatical structures.

Prerequisites: German 202b and 204b or equivalent

German 304b Advanced German Language: Topics and Texts II 3-3-0

Continuation of German 303a. Further exploration of literary analysis through class discussions, oral reports and compositions.

Prerequisite: German 303a or equivalent

German 305a Advanced German Language: Texts and Contexts I 3-3-0

The purpose of this course is to advance oral and written proficiency in the language and to introduce students to German cultural history over the last hundred years. There will also be a review of complex aspects of German grammar.

Prerequisites: German 202b and 204b or equivalent

German 306b Advanced German Language: Texts and Contexts II 3-3-0

Continuation of German 305a. Further development of communicative and interpretative competence.

Prerequisite: German 305a or equivalent

Literature and Civilization Courses

German 235ab Introduction to German Literature 3-3-0

This course provides students with an introduction to the major writers and movements of German literature, from the Middle Ages to the end of the 19th century. It will examine a representative selection of German literary masterpieces from various periods and genres.

No prerequisite

German 250ab German Civilization and Culture 3-3-0

A survey of German civilization from the rise of nationalism and the beginning of the industrial revolution in the 19th century to the re-unified Germany of the 21st century. Students will become acquainted with key developments within German-speaking cultures, including aspects of history, philosophy, literature, music and visual arts.

No prerequisite

German 320ab German Poetry 3-3-0

This course introduces students to the study of German poetry from the Enlightenment to today. Through a representative selection of poems by the most prominent German poets, students will be familiarized with the various literary movements that have marked the history of German literature. Special attention will be paid to the forms, themes and patterns that characterize German poetry in its different manifestations.

Prerequisites: German 202 and 204b or equivalent

German 330ab German Drama 3-3-0

This course introduces students to the development of German-language drama from the Enlightenment to today through an examination of the major works of influential playwrights and dramatic theorists. The themes investigated include religion, revolution, class struggle, socialism, and the Holocaust. Authors may include Lessing, Goethe, Büchner, Hauptmann, Schnitzler, Wedekind, Dürrenmatt, Weiss, and Müller.

Prerequisites: German 202 and 204b or equivalent

German 370ab Introduction to German Film 3-3-3
This course provides an overview of the different movements that shaped the history of the German cinema: from expressionism to the new German comedy, from the Oberhausen manifesto to the Defa film industry of the former GDR. The ways in which film and its imagery reflect key features of Germany's recent past and present will be examined and discussed. Prominent directors to be studied may include Murnau, Lang, Staudte, Fassbinder, Wenders, Dörrie, Carow, Wolf, von Trotta and others. Classes will be conducted in English. Students in a German Studies programme will submit their written assignments in German and will attend a discussion hour in German on alternating weeks.

Prerequisites: none for students not in a German Studies programme; German 202 and 204b for students in such a programme

German 371ab East German Cinema: from Rubble Films to Ostalgie 3-3-3

This course explores the history of East German cinema through the films produced by the state-owned studios of the DEFA (Deutsche Film-Aktiengesellschaft) from 1946 to 1992, and focuses on the following issues: the possibilities and limitations of socialist realism; censorship; the pursuit of individual freedom; gender and sexuality. A diversity of film genres will be studied including rubble films (Trümmerfilme), westerns, science fiction, and musicals. Attention will also be drawn to the post-Wende film production from directors who express nostalgia, *Ostalgie*, for life in the former GDR. Classes will be conducted in English. Students in a German Studies programme will submit their written assignments in German and will attend a discussion hour in German on alternating weeks.

Prerequisites: none for students not in a German Studies programme; German 202 and 204b for students in such a programme

German 380ab German Literature and Culture before 1700 3-3-0

This course introduces students to literary masterpieces from the Middle Ages to the Baroque Period. Discussions of poetry, drama, and narrative address not only general questions of historical context and literary form, but also issues specific to the respective epochs. Readings may include works by Straßburg, Aue, von der Vogelweide, Meister Eckhart, Brant, Luther, Fleming, Grimmelshausen, Gryphius, Opitz.

Prerequisites: German 202b and 204b or equivalent

German 381ab German Literature and Culture in the Age of Goethe 3-3-0

This course introduces students to the major writers from the Enlightenment to Romanticism in the context of cultural and intellectual history. Readings may include works by Kant, Lessing, Moritz, Goethe, Schiller, Novalis, Hoffmann, the Brothers Grimm.

Prerequisites: German 202b and 204b or equivalent

German 382ab Nineteenth-Century German Literature and Culture 3-3-0

This course examines fiction, poetry, and drama of the 19th century within the framework of major historical developments and socio-cultural contexts. Central literary movements to be studied are Young Germany, Realism, and Naturalism. Authors may include Heine, Büchner, Fontane, Storm, Nietzsche, and Hauptmann.

Prerequisites: German 202b and 204b or equivalent

German 383ab Twentieth-Century German Literature and Culture I 3-3-0

This course examines influential literary works from fin-de-siècle Vienna to the end of World War II within the framework of major historical events and socio-cultural contexts. Central literary movements to be studied are Impressionism, Decadence, Expressionism, and Exile Literature. Authors may include Schnitzler, Freud, Wedekind, Rilke, T. Mann, Kafka, Trakl, Lasker-Schüler, Seghers and Brecht.

Prerequisites: German 202b and 204b or equivalent

German 384ab Twentieth-Century German Literature and Culture II 3-3-0

This course introduces students to fiction, poetry, and drama from the end of World War II to post-Wende Germany viewed within their social and cultural context and against the backdrop of contemporary literary theory. Among the topics to be considered: *Vergangenheitsbewältigung*, the Holocaust, socialist realism, and post-modernism. Authors may include Böll, Celan, Bachmann, Grass, Kirsch, Wolf, Müller, Jelinek, Heym, Brüssig.

Prerequisites: German 202b and 204b or equivalent

German 385ab Seminar in Literature 3-3-0

Research and individual projects within an area of German literature centering on a specific period, genre and/or author.

Prerequisites: German 202b and 204b or equivalent

German 386ab Women in German Literature and Culture 3-3-0

This course explores the literary and cultural history of women writers, filmmakers and artists of the 20th century in German-speaking countries. A wide variety of literary genres (the short story, the novel, poetry, correspondence, screenplays) as well as themes and motifs (sexuality, gender issues, the influence of the First and Second World Wars, subjectivity, the environment) will be covered.

Prerequisites: German 202 and 204b or equivalent

Independent Study Courses

German 315a Independent Study I 3-0-0

Advanced level projects within the area of German language, literature or civilization.

Prerequisite: Permission of Instructor

German 316b Independent Study II 3-0-0

Advanced level projects within the area of German language, literature or civilization.

Prerequisite: Permission of Instructor

German 317a Independent Study III 3-0-0

Advanced level projects within the area of German language, literature or civilization.

Prerequisite: Permission of Instructor

German 318b Independent Study IV 3-0-0

Advanced level projects within the area of German language, literature or civilization.

Prerequisite: Permission of Instructor

Hispanic Studies

Major in Hispanic Studies - 42 credits.

Spanish 101	Spanish Language I
Spanish 102	Spanish Language II
Spanish 201	Spanish Language III and Spanish 203 Spanish Practice I
Spanish 202	Spanish Language IV and Spanish 204 Spanish Practice II
Spanish 301	Advanced Spanish: Topics and Texts 1
Spanish 302	Advanced Spanish: Topics and Texts II
Spanish 325	Advanced Spanish Grammar
Spanish 331	Introduction to Peninsular Literature
Spanish 332	Introduction to Spanish American Literature

And three 300 level courses chosen from the following group:

Spanish 308	Business Spanish
Spanish 311	Spain: Civilization and Culture
Spanish 313	Mexico: Civilization and Culture
Spanish 314	The Central American Region and the Spanish Caribbean: Civilization and Culture
Spanish 317	The Southern Cone and the Andean Region: Civilization and Culture
Spanish 318	Spanish Cinema
Spanish 319	Topics in Hispanic Culture
Spanish 321	History of the Spanish Language
Spanish 326	Spanish Phonetics
Spanish 327	Directed readings and Research I
Spanish 328	Directed readings and Research II
Spanish 330	Major Hispanic Authors
Spanish 333	Hispanic Literature and Films
Spanish 334	Spanish Caribbean Literature
Spanish 341	Seminar in Linguistics
Spanish 342	Seminar in Literature

Major in Modern Languages with concentration in Hispanic Studies - 30 credits.

Spanish 101	Spanish Language I
Spanish 102	Spanish Language II
Spanish 201	Spanish Language III and Spanish 203 Spanish Practice I
Spanish 202	Spanish Language IV and Spanish 204 Spanish Practice II
Spanish 301	Advanced Spanish: Topics and Texts I or Spanish 302 Advanced Spanish: Topics and Texts II
Spanish 325	Advanced Spanish Grammar
Spanish 331	Introduction to Peninsular Literature or Spanish 332 Introduction to Spanish American Literature

And one 300 level =

Spanish 308	Business Spanish
Spanish 311	Spain: Civilization and Culture
Spanish 313	Mexico: Civilization and Culture
Spanish 314	The Central American Region and the Spanish Caribbean: Civilization and Culture
Spanish 317	The Southern Cone and the Andean Region: Civilization and Culture
Spanish 318	Spanish Cinema
Spanish 319	Topics in Hispanic Culture
Spanish 321	History of the Spanish Language
Spanish 326	Spanish Phonetics
Spanish 327	Directed readings and Research I
Spanish 328	Directed readings and Research II
Spanish 330	Major Hispanic Authors
Spanish 333	Hispanic Literature and Films
Spanish 334	Spanish Caribbean Literature
Spanish 341	Seminar in Linguistics
Spanish 342	Seminar in Literature

Double Major French – Spanish and Education – 24 credits in Spanish

Spanish 203	Spanish Practice I
Spanish 204	Spanish Practice II
Spanish 301	Advanced Spanish: Topics and Texts I
Spanish 302	Advanced Spanish: Topics and Texts II
Spanish 325	Advanced Spanish Grammar
Spanish 331	Introduction to Peninsular Literature
Spanish 332	Introduction to Spanish American Literature

And one 300 level course chosen from the following:

Spanish 308	Business Spanish
Spanish 311	Spain: Civilization and Culture
Spanish 313	Mexico: Civilization and Culture
Spanish 314	The Central American Region and the Spanish Caribbean: Civilization and Culture
Spanish 317	The Southern Cone and the Andean Region: Civilization and Culture
Spanish 318	Spanish Cinema
Spanish 319	Topics in Hispanic Culture
Spanish 321	History of the Spanish Language
Spanish 326	Spanish Phonetics
Spanish 327	Directed readings and Research I
Spanish 328	Directed readings and Research II

Spanish 330	Major Hispanic Authors
Spanish 333	Hispanic Literature and Films
Spanish 334	Spanish Caribbean Literature
Spanish 341	Seminar in Linguistics
Spanish 342	Seminar in Literature

Minor Hispanic Studies - 24 credits.

Spanish 101	Spanish Language I
Spanish 102	Spanish Language II
Spanish 201	Spanish Language III and Spanish 203 Spanish Practice I
Spanish 202	Spanish Language IV and Spanish 204 Spanish Practice II
Spanish 301	Advanced Spanish: Topics and Texts I or Spanish 302 Advanced Spanish : Topics and Texts II

And one 300 level course chosen from the following:

Spanish 308	Business Spanish
Spanish 311	Spain: Civilization and Culture
Spanish 313	Mexico: Civilization and Culture
Spanish 314	The Central American Region and the Spanish Caribbean: Civilization and Culture
Spanish 317	The Southern Cone and the Andean Region: Civilization and Culture
Spanish 318	Spanish Cinema
Spanish 319	Topics in Hispanic Culture
Spanish 321	History of the Spanish Language
Spanish 325	Advanced Spanish Grammar
Spanish 326	Spanish Phonetics
Spanish 327	Directed readings and Research I
Spanish 328	Directed readings and Research II
Spanish 330	Major Hispanic Authors
Spanish 331	Introduction to Peninsular Literature
Spanish 332	Introduction to Spanish American Literature
Spanish 333	Hispanic Literature and Films
Spanish 334	Spanish Caribbean Literature
Spanish 341	Seminar in Linguistics
Spanish 342	Seminar in Literature

Certificate in Hispanic Studies 30 credits.

Spanish 101	Spanish Language I
Spanish 102	Spanish Language II
Spanish 201	Spanish Language III and Spanish 203 Spanish Practice I
Spanish 202	Spanish Language IV and Spanish 204 Spanish Practice II
Spanish 301	Advanced Spanish Language: Topics and Texts I or Spanish 302 Advanced Spanish Language: Topics and Texts II

And three 300 level courses chosen from the following:

Spanish 325	Advanced Spanish Grammar
Spanish 331	Introduction to Peninsular Literature
Spanish 332	Introduction to Spanish American Literature
Spanish 308	Business Spanish
Spanish 311	Spain: Civilization and Culture
Spanish 313	Mexico: Civilization and Culture
Spanish 314	The Central American Region and the Spanish Caribbean: Civilization and Culture

Spanish 317 The Southern Cone and the Andean Region:
Civilization and Culture

Spanish 318 Spanish Cinema

Spanish 319 Topics in Hispanic Culture

Spanish 321 History of the Spanish Language

Spanish 326 Spanish Phonetics

Spanish 327 Directed readings and Research I

Spanish 328 Directed readings and Research II

Spanish 330 Major Hispanic Authors

Spanish 333 Hispanic Literature and Films

Spanish 334 Spanish Caribbean Literature

Spanish 341 Seminar in Linguistics

Spanish 342 Seminar in Literature

Please note:

- 1) *Students with a Major in Hispanic Studies, a Major in Modern Languages with the concentration in Hispanic Studies and students with a Minor in Hispanic Studies must take SPA201a concurrently with SPA203a, and SPA202b concurrently with SPA204b.*
- 2) *Independent Studies courses are only offered to students with high academic standing and in consultation with the professor.*
- 3) *Spanish courses fall into the areas of language, civilization and culture, linguistics, and literature. All courses are taught in Spanish. Third-year course offerings will vary regularly over a two-year cycle.*
- 4) *the Hispanic Studies Section strongly encourages students with a Major in Hispanic Studies to spend an immersion semester abroad.*

In addition to their degree requirements, Majors and Minors in the program are strongly encouraged to take the international DELE exams (Diplomas de Español Lengua Extranjera) supervised by the Ministry of Education of Spain and the Instituto Cervantes. These exams test three levels of mastery of the Spanish language: Certificado Inicial, Diploma Básico, Diploma Superior. Examinations are held in May, at Bishop's, which is an official Spanish Language Exam Centre in Quebec.

NB: *For all programmes, standard course requirements are indicated for beginning students. Students who have already attained a degree of competence in Spanish will be required to replace lower level courses with higher level courses in order to complete programme requirements.*

Language Courses

Spanish 100b Spanish Language I-II: Intensive Course 6-6-0

The course covers the contents of Spanish 101a and Spanish 102b in one semester. Language audio exercises are included.

No prerequisite

Spanish 101a Spanish Language I 3-3-0

The course is designed for students with little or no background in Spanish. Speaking skills are developed with an orientation toward real-life tasks and genuine communication. Listening trains the student to recognize words, phrases, and international patterns in spoken Spanish. The course includes language audio exercises.

No prerequisite.

Spanish 102b Spanish Language II 3-3-0

The course is a continuation of Spanish Language I. It is proficiency-based and includes an elementary survey of the basic categories of Spanish grammar. The general objective is Spanish communication. Language audio exercises are included.

Prerequisite: Spanish 101a or equivalent

Spanish 120a Spanish Language II-III Intensive 3-3-0

This course covers the contents of SPA102a and SPA201a in one semester. The course is designed for students who are able to communicate in Spanish but need additional exposure to the basic structures and functions of the language. Students may take SPA203a concurrently. Upon completion of SPA120a, students will be allowed to take SPA202b and SPA204b. Language audio exercises are included.

Prerequisite: sufficient knowledge of Spanish

Spanish 201a Spanish Language III 3-3-0

The course is designed for students with a basic background in Spanish. The purpose of this course is to give a better understanding of the Spanish language. Emphasis is placed on using the acquired language. Students will be able to more easily communicate their own ideas and will enhance their written and oral communication. Language audio exercises are included.

Prerequisite: Spanish 102b or equivalent

Spanish 202b Spanish Language IV 3-3-0

An intensive review of the Spanish language. Oral and written exercises with attention to underlying structures lead to practice with complex structures in speech, reading, and writing. Language audio exercises are included.

Prerequisite: Spanish 201a or Spanish 120a or equivalent

Spanish 203a Spanish Practice I 3-3-0

This course is designed to complement the Intermediate Spanish Language course. Listening and reading comprehension will be improved through regular listening activities based on authentic texts and through the close reading of a novel. Grammar is presented using traditional exercises.

Prerequisite: Spanish 102b or equivalent

Spanish 204b Spanish Practice II 3-3-0

A continuation of Spanish Practice I. The course involves the review of difficult aspects of Spanish morphology and syntax. Expression will be improved through regular oral and writing activities.

Prerequisite: Spanish 203a or equivalent

Spanish 301ab Advanced Spanish: Topics and Texts I 3-3-0

The purpose of this course is to develop linguistic competence using the Hispanic world as a focus for class discussion, grammar review, and introduction to Hispanic social contexts and texts. Course materials may also include films, interviews, selections from the press, as well as literary or historical readings.

Prerequisite: Spanish 202 and Spanish 204 or equivalent

Spanish 302ab Advanced Spanish: Topics and Texts II 3-3-0

This course continues to reinforce the practice of oral and written communication in Spanish through topics in contemporary cultural materials from Spain and Spanish American countries. Students will focus on refining pronunciation and developing vocabulary. Course work involves grammar review and practice writing.

Prerequisite: Spanish 202 and Spanish 204 or equivalent

Spanish 308ab Business Spanish 3-3-0

This course builds on grammar and vocabulary knowledge already acquired at the intermediate level provides students with practical uses of spoken and written Spanish for business contexts, commercial vocabulary, economic, and technical terminology in Spanish. Composition based on models of business correspondence directed to Spanish-speaking

Prerequisite: Spanish 202b and Spanish 204b or equivalent

Civilization and Culture

Spanish 311ab Spain: Civilization and Culture 3-3-0

The course examines Spain through its Roman, Arab, Jewish and Christian history, and through its literature, art, language and customs. The objective of the course is an understanding of present-day Spanish culture and society. The use of compact discs, CDrom and video will complement the information from the textbook.

Prerequisite: Spanish 202b

Spanish 313ab Mexico: Civilization and Culture 3-3-0

This course will focus on the different periods in the history of Mexican culture and society. Beginning with pre-Aztec civilization, the course will examine the political, economic and cultural organization that evolved up to the Spanish Conquest of the 16th century. The Mexican Baroque and succeeding periods will then be examined with particular emphasis on the structure and composition of the indigenous and Spanish populations. Special attention will be paid to this socio-economic context of each period, specifically those characteristics which led ultimately to the Revolution. Finally, the course will focus on the leading intellectuals of the 19th and 20th centuries, including the muralists, and the crucial events that have shaped present-day Mexico.

Prerequisite: Spanish 202b

Spanish 314ab The Central American Region and the Spanish Caribbean: Civilization and Culture 3-3-0

This course offers an overview of major historical movements involving political, social, economic and cultural developments. Emphasis is on the major achievements of Cuba, Puerto Rico, the Dominican Republic, Venezuela, Colombia, and the Central American countries.

Prerequisite: Spanish 202b

Spanish 317ab The Southern Cone and the Andean Region: Civilization and Culture 3-3-0

This course involves a study of the culture and civilization of the region from a variety of viewpoints: historical, literary, sociological, anthropological, and political. Emphasis is on the major achievements of Argentina, Peru, Uruguay, Paraguay, Ecuador, Bolivia, and Chile.

Prerequisite: Spanish 202b and Spanish 204b or equivalent

Spanish 318ab Spanish Cinema 3-3-2

This course is designed to familiarize students with the Spanish Cinema and will consider the political, sociological and cultural context within which Spanish Cinema has developed. The course will examine works of film-makers who have contributed to the creation of contemporary Spanish Cinema, including, Buñuel, Saura, Pilar Miró, Almodóvar and others. Students will be required to watch films in addition to attending class.

Prerequisite: Spanish 202b and Spanish 204b or equivalent

Spanish 319ab Topics in Hispanic Culture 3-3-0

Cultural issues in the Spanish-speaking world. Topics include film, journalism, religion, language in society, popular and mass culture, visual arts, immigration, mestizaje, and slavery.

Prerequisite: Spanish 202b and Spanish 204b or equivalent

Literature

Spanish 330ab Major Hispanic Authors 3-3-0

This course offers a selection of representative works from the major writers and literary periods in Spain and Spanish America. Authors include Cervantes, Lope de Vega, Calderón, Galdós, García Márquez, Cortázar, Fuentes, Paz, Carpentier, and others. A variety of literary genres will be examined.

Prerequisite: Spanish 331a or 332a

Spanish 331a Introduction to Peninsular Literature 3-3-0

A course designed to cover the development of literature in Spain through selected readings with particular attention to the Twentieth Century. Such authors as Camilo José Cela, Miguel Delibes, Carmen Gaité, Ana María Matute will serve to develop reading facility and appreciation of the written language. Specific topics which arise from the readings will initiate discussions, oral expositions and compositions.

Prerequisite: Spanish 204b

Spanish 332a Introduction to Spanish American Literature 3-3-0

A course which surveys the development of literature in Spanish America with emphasis on modern authors. Included are works by such outstanding writers as Alejo Carpentier, Julio Cortázar, José Donoso, Carlos Fuentes, Gabriel García Márquez, Juan Rulfo. The course provides opportunities to develop reading facility and appreciation of literature through selected texts. Discussions and oral presentations on specific topics arising from the readings will help to develop oral fluency. Writing competence will be reinforced by compositions.

Prerequisite: Spanish 204b

Spanish 333ab Hispanic Literature and Films 3-3-2

This course is a survey of Hispanic cinema on literary masterpieces. Students will examine literary texts, scripts, and their screen adaptations. Writers and directors include Gabriel García Márquez, Manuel Puig, Camilo José Cela, Edmundo Desnoes, Almudena Grandes, Luis Buñuel, Héctor Babenco, Carlos Saura, Pedro Almodóvar, Tomás, Gutiérrez Alea, and others.

Prerequisite: Spanish 331a or 332a

Spanish 334ab Spanish Caribbean Literature 3-3-0

This course explores how Caribbean literature in Spanish from countries such as Cuba, Porto Rico and the Dominican Republic is related to the history of slavery, colonialism and post-colonialism in the region. The course will focus on the influential role of ethnicity, gender and socio-political development in the formation and interpretation of texts. Authors may include Carpentier, Fernández Retamar, Rosario Ferré, Ana Lydia Vega and others.

Prerequisite: Spanish 331a or 332a

Spanish 335ab Directed readings and Research I 3-3-0

This course will involve tutorial supervision of research on subjects and readings from Peninsular Literature not treated in regular courses.

Prerequisite: Spanish 331 and by permission of Hispanic Studies Section.

Spanish 336ab Directed readings and Research II 3-3-0

This course will involve tutorial supervision of research on subjects and readings from Spanish American Literature not treated in regular courses.

Prerequisite: Spanish 332 and by permission of Hispanic Studies Section.

Linguistics

Spanish 321ab History of the Spanish Language 3-3-0

This course focuses on the evolution of the Spanish language from its origins to the present. This diachronic analysis will encompass linguistic aspects such as phonology, morphology, syntax, and semantics.

Prerequisite: Spanish 204b

Spanish 325ab Advanced Spanish Grammar 3-3-0

The main objective of this course is an intensive review of the more complex aspects of Spanish grammar for non-native speakers. The curriculum will cover specific areas of grammar: indicative/subjunctive, ser/estar, prepositions

Prerequisite: Spanish 204b

Spanish 326 ab Spanish Phonetics and Pronunciation 3-3-0

This course will involve a study of Spanish pronunciation based on phonetics, including the basic concepts of phonetic description and transcription and the study of Spanish vowel and consonant systems, stress and intonation. Attention will be paid to individual difficulties.

Prerequisite: Spanish 204b or by permission of the Hispanic Studies Section

Seminars

Spanish 341b Seminar in Linguistics 3-3-0

Research and individual projects within an area of Spanish Linguistics.

Prerequisite: History of the Spanish language (Spanish 321ab) or Advanced Spanish Grammar (Spa 325) or Spanish Phonetics and Pronunciation (Spa 326)

Spanish 342b Seminar in Literature 3-3-0

Research and individual projects within an area of Peninsular or Spanish American Literature.

Prerequisite: Introduction to Peninsular Literature (Spanish 331a) or Introduction to Spanish American Literature (332a)

Independent Studies

Spanish 315ab Independent Studies I 3-0-0

Individual study projects within an area of Spanish linguistics, literature or civilization.

Prerequisite: Introduction to Peninsular Literature (SPA 331a) or Introduction to Spanish American Literature (SPA 332a) or Advanced Spanish Grammar (Spa 325) or Spanish Phonetics and Pronunciation (Spa 326)

Spanish 316ab Independent Studies II 3-0-0

Individual study projects within an area of Spanish linguistics, literature or civilization.

Prerequisite: Introduction to Peninsular Literature (SPA 331a) or Introduction to Spanish American Literature (SPA 332a) or Advanced Spanish Grammar (Spa 325) or Spanish Phonetics and Pronunciation (Spa 326)

Italian Studies

Major in Modern Languages

The Italian component consists of 30 credits.

Minor in Italian

Students may earn a minor concentration in Italian by obtaining 24 credits in Italian courses.

Italian 100b Introductory Italian Language: Intensive Course 6-6-1

A beginners course conveying a basic knowledge of spoken and written Italian as well as the fundamentals of Italian grammar; it covers the contents of ITA 101a and ITA 102b in one semester.

Italian 101a Introductory Italian Language I 3-3-0

This course intends to give beginners a basic knowledge of spoken and written Italian as well as the fundamentals of Italian grammar.

Italian 102b Introductory Italian Language II 3-3-0

Continuation of Italian 101a. Intensive practice in oral and written Italian.

Prerequisite: Italian 101a or equivalent

Italian 201a Intermediate Italian I 3-3-0

The aims of this course are to continue the linguistic studies begun in the first year and to introduce students to modern Italian society. Intensive practice in speech patterns and written structures.

Italian 202b Intermediate Italian II 3-3-0

Continuation of Italian 201a.

Prerequisite: Italian 201a

Italian 203a Selected Topics in Italian I 3-3-0

The course is designed to give students the opportunity to develop the oral and written skills as well as the confidence needed to complement the study of grammar, previously undertaken, with a variety of contemporary texts emphasizing the more practical aspects pertaining to the country's historical, social and cultural manifestations. A linguistic analysis of students' written assignments, aiming at reviewing structures and vocabulary, will be dealt with by way of group discussions.

Prerequisite: Italian 102b

Corequisite: Italian 201a

Italian 204b Selected Topics in Italian II 3-3-0

A continuation of Italian 203a. Further development of communicative skills and discriminate use of audio-visual material.

Prerequisite: Italian 203a

Corequisite: Italian 202b

Italian 235ab Introduction to Italian Literature 3-3-0

A survey of Italian literature from its origins to the 16th century. The course focuses on writers such as Dante, Petrarca, Boccaccio, Machiavelli, and Ariosto in an effort to elucidate the many facets of Italian Renaissance and at the same time comprehend the enormous impact, both literary and linguistic, these authors had on future generations of Italian as well as European intellectuals.

This course is given in English and cannot be counted towards fulfilling the credit requirements of an Italian concentration within the Major in Modern Languages or of a Minor in Italian.

Italian 301a Advanced Italian I 3-3-0

The aim of this course is to reinforce the active and passive knowledge of the Italian language. Selected readings on specific topics i.e.: Italian language and civilization, will be presented and discussed.

Texts: TBA

Prerequisite: Italian 202b

Italian 302b Advanced Italian II 3-3-0

Continuation of Italian 301a.

Prerequisite: Italian 301a

Italian 303a Grammar and Composition 3-3-0

Texts relating to Italian language and civilization.

Prerequisite: Italian 202b or equivalent

Italian 304b Conversational Italian 3-3-0

Aspects of Italian culture, history and writing.

Prerequisite: Italian 202b or equivalent

Italian 305a Introduction to Italian Literature I 3-3-0

A survey of Italian literature from its origins to the 16th century. The course focuses on writers such as Dante, Petrarca, Boccaccio, Machiavelli and Ariosto in an effort to elucidate the many facets of Italian Renaissance and at the same time comprehend the enormous impact, both literary and linguistic, these authors had on future generations of Italian as well as European intellectuals.

Prerequisite: Italian 202b

Italian 306b Introduction to Italian Literature II 3-3-0

Continuation of Italian 305a. Influential authors ranging from Tasso to Goldoni, from Manzoni to Leopardi, Verga and Pirandello will be presented and studied through excerpts of some of their most important works, in an attempt to investigate the socio-cultural contexts of Italian society from which specific issues were to evolve.

Prerequisite: Italian 305a

Italian 307a Modern Italian Prose 3-3-0

The course intends to offer students the opportunity to get acquainted with some of Italy's most representative prose writers of the 20th century. Selected passages from novels and short stories will be read and discussed so as to penetrate the socio-cultural realities from which such works originated.

Prerequisite: Italian 202b

Italian 308b Modern Italian Poetry 3-3-0

The course is complementary to Italian 307a. Major poets of the 20th century, from D'Annunzio to the avant-garde, will be studied. The last part of the course is devoted to the "cantautori" [=song writers and singers] phenomenon, in trying to assess the profound influence they had on some layers of Italian society of the post-war years, especially from the sixties on.

Prerequisite: Italian 307a

Italian 309ab Italian Cinema and Society 3-3-0

This course will investigate a few pivotal moments of Italian history during the twentieth century, through some of the major works of Italian cinema. Its main purpose is to develop an appreciation and understanding of the evolution and current of Italian cinema. The first part will concentrate on films associated with Neo-realism, specifically with those produced in the period of De Sica, Visconti, Rossellini and Antonioni. The second part deals with important directors active during and after the economic boom. Special attention will be drawn to the most politicized and socially committed filmmakers such as Monicelli, Scola, Moretti, Amelio and Giordana.

Italian 310ab Italian Cinema and Society (II) 3-3-0

This course deals with some of the critically acclaimed directors of the "commedia all'italiana", a cinematic genre originating in the "commedia dell'arte" tradition, as well as with some of the more politicized and socially committed filmmakers such as Rosi, Bellocchio, Petri and the Taviani brothers. The course will focus on directors representative of the first generation (Monicelli, Risi, Germi and Scola) and of the second generation (Moretti, Salvatores, Benigni and Amelio) so as to develop an appreciation of the evolution and current trends in Italian cinema.

Prerequisite: ITA 202 or equivalent

Italian 315a Independent Studies I 3-3-0

Individual study projects within the area of Italian language, literature, cinema or civilization.

Permission of Instructor

Italian 316b Independent Studies II 3-3-0

Individual study projects within the area of Italian language, literature, cinema or civilization.

Permission of Instructor

Italian 321a Letture guidate I 3-3-0

Guided readings in Italian literature. Masterpieces of Italian literature from the Risorgimento to World War I. A basic knowledge of Italian is required.

Italian 322b Letture guidate II 3-3-0

Guided readings in Italian literature. Masterpieces of Italian literature from World War I to the present time. A basic knowledge of Italian is required.

Japanese Studies

Minor in Japanese Studies

The Minor in Japanese Studies is designed to provide students with an intermediate to advanced level competence in Japanese along with an understanding of various aspects of Japanese society, its civilization, its culture and its institutions.

For a Minor in Japanese Studies students must complete 24 credits:

JSE101a	Introduction to Japanese Language I	
JSE102b	Introduction to Japanese Language II	
JSE201a	Intermediate Japanese Language I	
JSE202b	Intermediate Japanese Language II	
JSE301a	Advanced Japanese Language I	
JSE302b	Advanced Japanese Language II	
JSE150ab J	apanese Society and Culture	
JSE310ab	Independent Study: Topics in Japanese Language and Culture I	
JSE311ab	Independent Study: Topics in Japanese Language and Culture II	

Modern Languages Major: International Japanese Studies Component

Students who have been accepted to go on exchange in Japan may apply for the International Japanese Studies component of the Major in Modern Languages.

The component consists of 30 credits in Japanese and will constitute a concentration in Japanese Studies as part of a Major in Modern Languages. Courses are chosen prior to the exchange in consultation with the Head of the Japanese Studies section.

Language Courses:

JSE 100ab Introduction to Japanese Language I-II Intensive Course 6-6-2

This course covers the contents of Japanese 101a and Japanese 102b in one semester.

JSE 101a Introduction to Japanese Language I 3-3-1

The purpose of the course is to equip students with grammatical patterns and basic vocabulary of present day, standard Japanese. Hiragana, one of the three writing systems of the language, will be gradually introduced, followed by Katakana and Kanji. Grammar sessions will be conducted in English while in drill sessions maximum use of Japanese will be expected.

JSE 102b Introduction to Japanese Language II 3-3-1

Continuation of Introduction to the Japanese Language I.

Prerequisite JSE101 or equivalent

JSE 201a Intermediate Japanese Language I 3-3-1

This course introduces students to more grammatical (as well as lexical) items that can be put to immediate use. The purpose of the course is to equip the students with comprehensive grammatical patterns and vocabulary of present-day, standard Japanese at the basic level.

Prerequisite JSE102 or equivalent

JSE 202b Intermediate Japanese Language II 3-3-1

Continuation of Intermediate Japanese Language I.

Prerequisite JSE201 or equivalent

JSE 301a Advanced Japanese Language I 3-3-1

This course completes the over-all syntax of present-day Japanese, providing the students with a solid foundation for further studies in the field of their choice. The course adds more vocabulary as well as Kanji.

Prerequisite JSE202 or equivalent

JSE 302b Advanced Japanese Language II 3-3-1

Continuation of Advanced Japanese I.

Prerequisite JSE301 or equivalent

Courses on Japan:

JSE 150ab Japanese Society and Culture 3-3-0

This course is designed to give a basic level of knowledge on the main aspects of modern Japanese society and culture. The aim is twofold: first, to present modern Japan as it might be seen by the Japanese themselves, in hope that the student might learn to perceive Japanese society and culture from a Japanese point of view, and; second, to introduce some of the minute details – the intricacies – of everyday life in Japan which the student might not be aware of, yet which will help him or her to better understand and experience the ways of Japan.

JSE 310ab Independent Study: Topics in Japanese Language and Culture I 3-3-0

Students will undertake projects related to some aspect of Japanese language, literature, society, and/or culture.

Prerequisite JSE 202b or instructor's permission

JSE 311ab Independent Studies: Topics in Japanese Language and Culture II 3-3-0

Students will undertake projects related to some aspect of Japanese language, literature, society and/or culture.

Prerequisite: JSE 202b or Instructor's Permission

Music

The Department of Music offers a wide range of courses which can provide a general introduction to the discipline for the university student or lead to a full B.A. Major or Honours in Music. The B.A. is a liberal arts degree, upholding the centuries-old tradition of music as a humanistic study. At the same time, solo and ensemble performance comprise a vital complement to the historical and theoretical study of music. The program is ideal for the student who wishes to make a specialization of strong general musicianship.

Courses leading to the B.A. Major or Honours in music, following either a Classical or Popular music stream, are drawn from four areas of study: history and literature of music; theory and composition; individual practical study in both classical and jazz instruments or voice; and choral or instrumental ensemble. Courses in the history and literature of music include historical surveys, genre studies, and special interest courses on many topics. The collection of scores, recordings and DVDS, and critical studies housed in the University Music Library provides a basic resource for this study. Basic theory courses are combined with theory skills classes (ear-training, sight-singing and keyboard harmony), and related courses in composition, harmony, form and analysis, counterpoint, orchestration and electronic music are also available. Performance study is available in all orchestral, band and keyboard instruments, plus voice. Instruction is provided by professional musicians who live and work in the region. Ensembles include The University Singers, a choir of 100 members, Chamber Music Ensembles, Jazz Combos, Rock Bands and the Bishop's Chamber Orchestra.

The Department is housed in the gracious, 19th-century Norton Building. In addition to the acoustically superb, 165-seat Bandeen Recital Hall, facilities include studios for teaching and ensemble rehearsal, classrooms, a theory lab, a fully-equipped electronic music studio capable of making quality recordings, and a number of practice rooms all equipped with pianos. There is a 2-manual Karl Wilhelm tracker organ in St. Mark's Chapel and a 9-foot Steinway piano in Centennial Theatre. In addition the Department has a Wilhelm continuo organ, a 2-manual French Baroque harpsichord made by Montreal craftsman Yves Beaupré (both ideal for Baroque chamber ensembles), two 7-foot Hamburg Steinway pianos, a 7-foot American Steinway piano, and a number of Yamaha upright pianos.

Beyond its academic role, the Department of Music is a centre of cultural activities for the University community and beyond. The Department offers a full series of concerts by Canadian and international musicians in Bandeen Hall, and a series of organ recitals in St. Mark's Chapel. Several Artists-in-Residence visit the Department each year for week-long intensive residences to present concerts and master classes with Bishop's music students.

The Program

B.A. Honours in Music

Required: 60 credits

Candidates pursuing the Honours program, whether in Classical or Popular Music streams, must fulfill the following requirements, in addition to those listed below for the Music Major:

Music Theory or Composition option:

"00" cycle (music literature)	MUS 300
"30" cycle (theory and composition)	3 additional credits MUS 435: Thesis

Music History option:

"00" cycle (music literature)	MUS 300
"40" cycle (music history)	3 additional credits MUS 445: Thesis

Special Project option:

"00" cycle (music literature)	MUS 300
music elective related to topic TBA	3 additional credits MUS 455: thesis

Performance option:

"00" cycle (music literature)	MUS 300
"70" cycle (performance study)	MUS 372 & 373 MUS 475: Recital

Students intending to elect an honours program should declare their intent in writing by the fourth full-time semester. An honours thesis or recital proposal must be approved by the Department. An average of at least 70%, calculated on the marks obtained in all courses attempted in both the first and second 30-credit program years, is required. In performance, an average of at least 80% is required in MUS 373 for those wishing to pursue this area of study.

B.A. Major in Music (Classical)

Required: 48 credits

"00" cycle (music literature)	6 credits
"20" cycle (aural/keyboards skills)	3 credits
"30" cycle (theory and composition)	15 credits**
"40" cycle (music history)	12 credits
"80" cycle (ensemble)	4 credits
MUS 172/173; 272/273 (performance study)	8 credits
272/273	

** MUS 131, 132, 139, 231 and one from 332, 333 or 335

In their first full year, all music majors normally should take the following courses (20 credits):

- Introduction to Musical Skills I and II (MUS 121 and 122)
- Materials of Music I and II (MUS 131 and 132)
- Intro to Electronic Music (MUS 139)
- Individual Practical Study I and II (MUS 172 and 173)
- One year of Ensemble (MUS 180/181, 182/183, 184/185, 186/187)

By the end of their second year, music majors should also normally

have completed the following courses (19 credits):

- Intermediate Musical Skills III (MUS 221)
- Materials of Music III (MUS 231)
- Two Music History courses (MUS 240-247)
- Individual Practical Study III and IV (MUS 272 and 273)
- One year of Ensemble (MUS 280/281, 282/283, 284/285, 286/287)

The remaining 9 credits required for the Music Major degree may be taken at any time during the student's stay at Bishop's, and of course all majors and minors are entitled to take more than the required number of music credits.

B.A. Major in Popular Music Studies (jazz, pop, rock, music theatre, film music or world music)

In addition to our classical music program, the Music Department at Bishop's University offers a solid musical education to those interested in pursuing a career in popular music—in other words, we train students to be better musicians in a field where the bulk of the world's music actually happens.

This program at Bishop's is modeled on our current classical one, sharing certain core courses, and can be favourably compared to similar programs offered across North America. Our program is designed to cover the practical side and intellectual aspects of the contemporary music streams of popular culture, including jazz, rock, pop music, theatre, film and world music through a guided instruction in literature, theory, composition, ensemble and instrument/voice performance study.

Required: 48 credits:

8 credits	MUS 172/173, 272/273: Individual Practical Study I/II, III/IV (4 x 2 credits)
4 credits	MUS 180/181, 280/281, 380/381; 184/185, 284/285, 384/385; 188/189, 288/289, 388/389: Ensemble (choice of 4 x 1 credit)
9 credits	MUS 101, 102, 103, 104, 105, 109: Music Literature (any 3 x 3 credits)
3 credits	MUS 290: Improvisation
15 credits	MUS 121, 122, 221: Musical Skills I, II and III (3 x 1 credits)
	MUS 131, 132, 231: Materials of Music I, II and III (3 x 3 credits)
	MUS 233: Materials of Popular Music (3 credits)
9 credits	Electives: MUS 139 (Electronic Music*) and a choice of music theatre production, film production, song writing, arranging/scoring, improvisation, composition, counterpoint, analysis, orchestration, music history and literature courses (any of 3 x 3 credits); (*required of all Music majors; also counts as a music literature)

Year 1 Requirements (20 credits)

MUS 131, MUS 132: Materials of Music I and II (6 credits)

MUS 121, MUS 122: Musical Skills I and II (2 credits)

MUS 139: Electronic Music (3 credits)

MUS 180/181, MUS 184/185, MUS 188/189: Ensemble
(2 credits)MUS 172, MUS 173: Individual Practical Study I and II
(4 credits)and one course from MUS 101, 102, 103, 104, 105, or 109: Popular
Music Literature (3 credits)**Year 2 Requirements (19 credits)**MUS 231: Materials of Music III; MUS 233: Materials of Popular
Music (6 credits)

MUS 221: Musical Skills III (1 credits)

MUS 284/285; MUS 280/281 or 288/289: Ensemble (2 credits)

MUS 272, MUS 273: Individual Practical Study III and IV
(4 credits)and two courses from MUS 101, 102, 103, 104, 105, or 109:
Popular Music Literature (6 credits)**B.A. Music Minor in “Popular Music Studies” (jazz, pop,
rock, music theatre, film music or world music)**

Required: 24 credits

- 4 credits MUS 172/173: Individual Practical Study
(2 x 2 credits)
- 1 credit MUS 181 or 184/185: Ensemble (any of 1 x
1 credit)
- 6 credits MUS 101, 102, 103, 104, 105, 109: Popular
Music Literature (any of 2 x 3 credits)
- 7 credits MUS 121: Musical Skills I (1 credit)
- MUS 130: Rudiments of Music Theory (if necessary);
MUS 131/132: Materials of Music I and II
(2 x 3 credits)
- 6 credits Electives: choice of courses in electronic
music, music theatre production, song writ-
ing, arranging/scoring, composition, coun-
terpoint, analysis, orchestration (admission
into upper-level theory courses dependent
upon student’s competency).

Double Major: Secondary Education and Music

Program requirements for students pursuing a double major in Secondary Education and Music may be found under “School of Education” in the Academic Calendar. All questions concerning courses and requirements should be referred to the Chairs of Music and of the School of Education.

B.A. Minor in Music

Required: 24 credits

- MUS 110a/111b6 credits
- MUS 121a1 credit
- MUS 130ab, 131a or 132b6 credits
- MUS 180 - 1872 credits
- MUS 172 & 1734 credits
- Music Electives5 credits

Music minors are requested to take at least one academic music course concurrently with MUS 172 & 173.

Certificate in Musical Studies

The Certificate in Musical Studies is designed for the part-time or community student who does not wish, or is not able, to take a full degree program. It allows the flexibility to focus on history and literature, theory, and where teaching resources permit, performance.

Students may take courses in the regular Fall, Winter or Spring sessions in Lennoxville, or at the Knowlton campus. Courses taken in the certificate program may be transferred later to a minor or major within a degree program in Music at Bishop’s University; however, students may not be enrolled in a certificate program and degree program at the same time.

Admissions Requirements*(See Regulations for Certificate Programs.)***Required: 30 credits**

MUS 130*, MUS 110, MUS 111 *If necessary

The remaining credits may be taken from the following list of courses, offered by the Department in rotation:

Music Literature MUS 103, 104, 106, 107, 108, 112, 114,
205, 207

Music Theory MUS 131, 132, 139, 231, 238, 332

Music History MUS 240, 241, 242, 244, 245, 246, 247

Music Performance* MUS 070/071, 170/171, 270/271, 370/371

**A supplementary instruction fee is levied for all individual performance courses.*

Ensemble courses will be permitted upon consultation with the Department

Admission

Students seeking admission must satisfy the general requirements for admission to the university. In addition, the Music Department requests that each applicant submit details of previous musical studies and experience. A placement audition, either live on campus or on a recording, is required. Please contact the Department directly for details.

As a general rule, students should possess their own instruments (with the exception of piano, harpsichord and organ).

MUSIC LITERATURE**Music 101ab Rock 101 3-3-0**

This course offers a survey of rock music from its origins to the modern day. Influences from blues, pop and other genres will be investigated to gain a deeper understanding of how this phenomenal movement changed the music world forever.

Music 102ab Music for the Movies 3-3-0

This course will discuss the history and aesthetics of film music as well as the techniques involved with the incorporation of sound into motion pictures. Examples from North American, foreign and animated films from every decade beginning in the 1930’s will offer the student a well-rounded introduction to this fascinating art form.

Music 103ab History and Analysis of Jazz to 1945 3-3-0

This course offers a chronological study of the different eras that have marked the evolution of Jazz in America. Analysis of form, melody, harmony, rhythm and improvisation techniques of the major works of the masters will be covered. Students who have successfully completed MUS 113 may not register for this course.

Music 104ab History and Analysis of Jazz 1945 - Present 3-3-0

This course offers a study of the different genres that have marked the evolution of Jazz in America since 1945. Analysis of form, melody, harmony, rhythm and improvisation techniques of the major works of the masters will be covered.

Music 105ab	World Music	3-3-0
This course will explore the music of non-western cultures including the Near and Far East, Latin America and Africa. Historical/cultural information as well as a large listening component will offer students exposure to music from all corners of the globe.		
Music 106ab	Song	3-3-0
The singer's repertoire is surveyed and analysed. Special attention is given to German and French song literature of the nineteenth century and the contemporary art song in English and French. Among the composers considered will be Schubert, Schumann, Brahms, Fauré, Duparc, Debussy, Britten and Ives.		
Music 107ab	Opera	3-3-0
Is it music or is it drama? The balance changes through the ages, but opera is always lyrical, emotional, sensational. This course will trace the evolution of opera from the earliest experiments in 1600 through the elaborate productions of the High Baroque; the birth of modern opera with Gluck and Mozart; the Golden Age of Italian bel canto from Rossini and Bellini through Verdi and Puccini; German opera from Beethoven to Wagner; and the new aesthetics of the 20th century, with Strauss, Berg and Stravinsky.		
Music 108ab	Choral and Sacred Music	3-3-0
A survey of choral music from its foundations in Gregorian Chant up to the present: the serene polyphony of the Renaissance; the Protestant Reformation with the chorale and related genres; oratorio, cantata, and passion; hymns; secular and sacred music in the 19th and 20th centuries, including avant-garde treatment of the voice.		
Music 109ab	Music and Theatre	3-3-0
This course will cover the field of popular musical theatre from its origins in 19th-century comic opera and operetta; to the Broadway musicals of Kern, Rogers and Hart/Hammerstein, Lerner and Loewe; the more sophisticated works of Bernstein and Sondheim; the spectacular shows of Andrew Lloyd Webber; and more recent Broadway offerings.		
Music 110a	The Art of Listening I	3-3-0
An introduction to music for the non-major. After a brief study of music rudiments—rhythm, scales, basic concepts and terms—we will put these ideas into more concrete terms in a guided survey of the best of Western art music, from Gregorian chant up to the time of Beethoven. Meet Palestrina, Monteverdi, Purcell, Vivaldi, Bach, Handel, Mozart and Haydn, among others, and see how they fit into our musical past. Special attention is paid to the art of listening to, and understanding, the music of these composers.		
Music 111b	The Art of Listening II	3-3-0
A continuation of the historical survey begun in Music 110a. We begin with the major Romantic composers, including Schubert, Schumann, Chopin, Verdi, Wagner, Brahms and Mahler. The course will continue with an examination of the 20th century, including early masters such as Debussy, Stravinsky, Schoenberg and Bartok, as well as more adventurous avant-garde fare: Cage, Varèse, Berio, Crumb and Steve Reich.		
Music 112ab	Music for Orchestra	3-3-0
Follow the history of music written for orchestra: concerto, symphony, symphonic poem and related genres. The concerto repertoire begins in 17th-century Italy with Corelli, evolves with Vivaldi and Bach, then passes through the matchless works by Mozart and into the great virtuosic creations of the 19th century. On the symphonic side, we move from Haydn and Beethoven to the great melodists and orchestrators of the Romantic era: Berlioz, Schumann, Brahms, Liszt, Strauss and Mahler. 20th-century creations by Bartok, Stravinsky and others will round out this survey.		
Music 114ab	Recital Music	3-3-0
This course will survey recital repertoire from the 17th to the 21st centuries. Included will be solo repertoire for harpsichord and piano, and chamber music such as the trio sonata, string quartet and related genres. Emphasis will be placed on the most important contributors to the repertoire: J.S. Bach, Mozart, Beethoven, Schubert, Chopin and Brahms, as well as on works of the 20th & 21st centuries. An effort will be made to coordinate course content with recitals given in the Music Department.		
Music 200a	Major Composers I	3-3-0
An intensive study of the biography, works and significance of one or more major composers of Western art music. May be counted towards fulfillment of the degree requirements for Music History.		
Music 201b	Major Composers II	3-3-0
An intensive study of the biography, works and significance of one or more major composers of Western art music. May be counted towards fulfillment of the degree requirements for Music History.		

Music 205ab	Canadian Music	3-3-0
Is there such a thing as Canadian music? Take this course and find out. We will look at music composed in Canada by the earliest French settlers; concert life in the 18th and 19th centuries; folk music saved in oral traditions across the country; and composers of the 20th century who draw on both folk and contemporary art music traditions. Get to know your national musical heritage, including Joseph Quesnel, Calixa Lavalée, Healey Willan, Claude Champagne, Harry Somers, John Weinzwieg, and many others.		
Music 207ab	Dance and Dance Music	3-3-0
This course will focus on the relation between dance and music. Three types of dance and dance music will be studied: ballet, from its birth at the courts of Louis XIII and Louis XIV to the present day; modern dance from its American pioneers in the late nineteenth century to contemporary examples world-wide; and social dance, with particular emphasis on dances that have influenced important forms in concert music (e.g. minuet, sarabande, gigue, waltz, tango). In keeping with the dual focus of the course we will examine the collaborations between noted pairs of choreographers and composer: Petipa/Tchaikovsky, Balanchine/Stravinsky, Graham/Copland, Cunningham/Cage, Childs/Glass, etc. Recordings, slides, videos and live dancers will be used to bring the material under discussion to life. This course has no prerequisite.		
Music 300ab	Introduction to Music Research and Bibliography	3-3-0
A seminar course designed to introduce students to bibliography and research techniques in the fields of music history and literature. Practical research and writing skills are taught in association with an introduction to the library and its resources: reference works, histories, catalogues, periodicals and other holdings. <i>Required for all Honours students</i>		

THEORY AND COMPOSITION

Music 121a	Introduction to Musical Skills I	1-2-0
An introduction to the fundamental skills of musicianship, including ear-training, sight-singing and basic keyboard skills.		
Music 122b	Introduction to Musical Skills II	1-2-0
Continuation of MUS 121a		
Music 130ab	Rudiments of Music Theory	3-3-1
An introduction to basic musical literacy, including rhythmic notation, reading in all modern clefs; spelling scales, intervals and triads; and the structure of the tonal system. <i>This course cannot be counted toward a Major or Honours in Music.</i>		
Music 131a	Materials of Music I	3-3-2
Review of the rudiments of music; the study of diatonic harmony, melody and voice-leading in the common-practice era. <i>Co-requisite: MUS 121a</i>		
Music 132b	Materials of Music II	3-3-2
Continuation of Music 131a <i>Co-requisite: MUS 122b</i>		
Music 139a	Introduction to Electronic Music	3-3-2
This course will provide an introduction to physical sound characteristics and synthesis, the historical background to electronic music and its repertoire, and MIDI event sequencing, music, copying and ear training applications. The use of a MIDI/digital audio workstation will be explored through a project done during studio lab time.		
Music 221a	Intermediate Musical Skills	1-2-0
Essential musicianship skills extended to chromatic language, including ear training, sight-singing and keyboard harmony.		
Music 222b	Advanced Musical Skills	1-2-0
Continuation of MUS 221a		
Music 231a	Materials of Music III	3-3-0
This course will focus on advanced diatonicism and chromaticism in the common-practice era through a study of applied chords, modulation, mixture and other chromatic harmonies. <i>Prerequisite: MUS 132b</i> <i>Co-requisite: MUS 221a</i>		
Music 233ab	Materials of Popular Music	3-3-0
This course will focus on the development of analytical and writing skills necessary for a deeper understanding of music in popular styles. Study will include jazz standards to progressive rock.		

Music 238ab	Composition I	3-3-0
This course will focus on various approaches to writing music through the investigation of different pitch language systems. Contemporary uses of rhythm, form, texture, colour and dynamics will also be studied with the goal of creating an original work.		
<i>Prerequisite: Music 131 or approval of instructor</i>		
Music 239ab	Electronic Music II	3-3-3
A study of object-based MIDI and digital audio programming with the goal of creating an original composition. Work will include study of advanced MIDI messaging and processing, virtual sequencer and sampler construction, digital audio theory and processing, as well as real-time interactive processing.		
<i>Prerequisite: Music 139</i>		
Music 290ab	Improvisation	3-3-0
This course will develop the skills necessary for successful tonal and non-tonal improvisation. Chord and scale relationships, existent improvisation vocabulary and concepts frequently encountered in changes will be examined in a variety of styles.		
Music 291ab	Song and Instrumental Writing	3-3-0
This course will provide students with the necessary techniques for composing songs and instrumental pieces in jazz, rock and pop styles.		
Music 292ab	Arranging and Scoring for Jazz and Pop Music	3-3-0
This course will provide students with the skills that will enable them to arrange pop and jazz tunes for a variety of instrumental/vocal ensembles.		
Music 293ab	The Music Profession	3-3-0
The course will introduce students to the practical side of the music business. Topics covered will include résumé building, recording a demo CD, gigging, grant applications and effective marketing techniques.		
Music 332ab	Advanced Harmony	3-3-0
This course stresses both the writing and analysis of advanced chromaticism in the common-practice era and the twentieth century. Music of Schubert, Brahms, Stravinsky and beyond.		
<i>This course is not available to students who have previously completed MUS 232.</i>		
<i>Prerequisite: Music 231</i>		
Music 333ab	Compositional Studies in Formal Design	3-3-0
Principles of formal analysis. Small to large level form is examined with respect to properties of harmony, melody, voice-leading, rhythm, texture and timbre.		
<i>Prerequisite: Music 131</i>		
Music 335ab	Compositional Studies in Counterpoint	3-3-0
An introduction to the writing of counterpoint. Fuxian species, Baroque dance forms, invertible counterpoint, motivic development, and the 2- and 3-part invention.		
<i>Prerequisite: Music 132</i>		
Music 337ab	Orchestration	3-3-0
An introduction to the art of orchestration and musical arrangement, which includes study of all the major orchestral instruments.		
<i>Prerequisite: Music 131</i>		
Music 338ab	Composition II	3-3-0
A study of advanced compositional techniques and forms. Students will compose for a variety of chamber music media in short exercises with the goal of creating an extended work as a major project.		
<i>Prerequisite: Music 238ab</i>		
Music 339ab	Electronic Music III	3-3-5
A continuation of MUS 239 with emphasis on analog 'tape music' techniques. An in-depth study of "classical" electronic music repertoire, with a view to the creation of new compositions.		
<i>Prerequisite: MUS 239ab</i>		
Music 435	Thesis: Composition on Music Theory	6-3-0
An individual topic to be chosen by the honours student in consultation with the department. Concert music/electronic or jazz options are available.		
Music 438ab	Composition III	3-3-0
A continuation of MUS 338.		
<i>Prerequisite: MUS 338</i>		
Music 439ab	Electronic Music IV	3-3-5
A continuation of MUS 339 with emphasis on the interaction of analog and digital instruments.		
A study of digital composition techniques and writing new programs, with a view to the creation of new compositions.		
<i>Prerequisite: MUS 339</i>		

MUSIC HISTORY

Music 240ab	Music in the Middle Ages	3-3-0
The earliest written music of the European tradition up to about 1450. Gregorian chant and liturgy, early song traditions such as troubadours and Meistersingers, liturgical drama, early polyphony, motets and polyphonic songs from France, Italy and England. The first known great composers—Hildegard of Bingen, Leonin and Perotin, Machaut, Ciconia and Dunstable.		
Music 241ab	Music of the Renaissance	3-3-0
Music from 1450-1600: the new humanist aesthetic of music. The evolution of the arts of counterpoint and imitation; the Golden Age of choral music, from Masses and motets to songs and madrigals; early developments in instrumental music. Dufay, Josquin, Palestrina, Lassus, Gesualdo, Byrd, Gabrieli, etc.		
Music 242ab	Music of the Baroque	3-3-0
The period from 1600 to 1750 sees the invention of opera, the emergence of instrumental music, and the development of national styles in Italy, France and Germany. New genres include oratorio, cantata, trio sonata, concerto, dance suite, fugue; music for lute, harpsichord and organ. Monteverdi, Corelli and Vivaldi; Lully, Rameau and Couperin; Schutz, Buxtehude and J.S. Bach; G.F. Handel.		
Music 244ab	Music of the Early Twentieth Century	3-3-0
The development of music from the turn of the century to the Second World War. The bewildering variety of musical styles in this era will be examined: impressionism, expressionism, neo-classical and neo-romantic, nationalist and radical; Debussy and Ravel, Schönberg and his followers, Stravinsky, Bartok, Hindemith, Prokofiev and Shostakovich, Ives and Varèse		
Music 245ab	Music since 1945	3-3-0
A survey of the principal developments in Western art music since the Second World War. Included in this study are electronic music, computer music, aleatory, total serialism, minimalism and post-modernism.		
Music 246ab	Classical Music	3-3-0
This course will cover the period from 1740 up to the death of Beethoven. An investigation of the roots of Classical style will be followed by a study of the three greatest composers of the era—Haydn, Mozart and Beethoven—and their contemporaries. Evolution of sonata form; impact of the piano; new genres like the symphony and string quartet; modern opera.		
<i>Formerly music 243ab</i>		
Music 247ab	Romantic Music	3-3-0
Music in the 19th century: new genres such as the lied, piano miniature and symphonic poem; new concepts such as program music, chromatic harmony, cyclic unity, virtuosity and nationalism. Large scale, big emotions and great tunes. Composers include Schubert, Chopin, Schumann, Liszt, Brahms, Wagner, Verdi, Mahler, etc.		
<i>Formerly music 243ab</i>		
Music 310a	Independent Studies I: Topics in Music History	3-1-0
Music 311b	Independent Studies II: Topics in Music History	3-1-0
Music 445f	Thesis: Music History	6-1-0
An individual topic to be chosen by the Honours student in consultation with the Department.		
Music 455f	Thesis: Special Project	6-1-0
An individual topic to be chosen by the Honours student in consultation with the Department.		
PRACTICAL STUDY		
Music 070a	Individual Practical Study: Rudiments of Performance I*	1-3/4-5
An introductory level performance course for students not sufficiently advanced to be enrolled in MUS 172. MUS 070a may be counted towards a Music Minor, but may not be counted towards a Major or Honours in Music. This course may be taken for credit by students outside of the Music program with the permission of the department, after an audition.		
Music 071b	Individual Practical Study: Rudiments of Performance II*	2-3/4-5
A continuation of MUS 070a. The same restrictions apply. A successful jury at the end of term is required for any further performance study.		

Music 170a	Elective Instrument I*	1-3/4-5	Music 182a	Chamber Music Ensemble I	1-3-0
Performance instruction for principal instrument or a second instrument which is not a program requirement. No jury required. <i>Open to Music Majors, Minors and Honours Students, and to non-Music students by audition.</i>			Small instrumental groups. Admission by audition only.		
Music 171b	Elective Instrument II*	2-3/4-5	Music 183b	Chamber Music Ensemble II	1-3-0
Performance instruction for principal instrument or a second instrument which is not a program requirement. End-of-semester jury required. <i>Open to Music Majors, Minors and Honours Students, and to non-Music students by audition.</i>			See description under Music 182a.		
Music 172a	Principal Instrument I*	2-1-5	Music 184a	Jazz/Improvisation Workshop I	1-3-0
Performance instruction in any classical or jazz instrument or voice. Participation in studio classes and attendance at Music Department recitals required. <i>Co-requisite with MUS 180a, 182a, 184a, 186a.</i> <i>Open to Majors and Minors in Music only.</i>			Mixed instrumental ensemble exploring the repertoires of popular music and jazz.		
Music 173b	Principal Instrument II*	2-1-5	Music 185b	Jazz/Improvisation Workshop II	1-3-0
See description under MUS 172a. Co-requisite with MUS 181b, 183b, 185b, 187b. <i>Open to Majors and Minors in Music only.</i>			See description under Music 184a.		
Music 270a	Elective Instrument III*	1-3/4-5	Music 186a	Chamber Orchestra I	1-3-0
See description under MUS 170a.			Formed fundamentally to explore the great repertoire for string orchestra, this group may include winds, brass and percussion for chamber music formations.		
Music 271b	Elective Instrument IV*	2-3/4-5	Music 187b	Chamber Orchestra II	1-3-0
See description under MUS 171b.			See description under Music 186a.		
Music 272a	Principal Instrument III*	2-1-5	Music 188a	Rock/Pop Band I	1-3-0
See description under MUS 172a.. <i>Co-requisite with MUS 280a, 282a, 284a, 286a.</i> <i>Open to Majors and Minors in Music only.</i>			These courses provide experience rehearsing and performing in a rock/pop band. Repertoire will be chosen from the rock and pop repertoire and each group will receive professional coaching. Entry by audition only.		
Music 273b	Principal Instrument IV*	2-1-5	Music 189b	Rock/Pop Band II	1-3-0
See description under MUS 172a. <i>Co-requisite with MUS 281b, 283b, 285b, 287b.</i> <i>Open to Majors and Minors in Music only.</i>			These courses provide experience rehearsing and performing in a rock/pop band. Repertoire will be chosen from the rock and pop repertoire and each group will receive professional coaching. Entry by audition only.		
Music 370a	Elective Instrument V*	1-3/4-5	Music 280a	Choral Ensemble III	1-3-0
See description under MUS 170a.			See description under Music 180a.		
Music 371b	Elective Instrument VI*	2-3/4-5	Music 281b	Choral Ensemble IV	1-3-0
See description under MUS 171b.			See description under Music 180a.		
Music 372a	Principal Instrument V*	2-1-5	Music 282a	Chamber Music Ensemble III	1-3-0
See description under MUS 172a. <i>Co-requisite with MUS 380a, 382a, 384a, 386a.</i> <i>Open to Performance Honours in Music only.</i>			See description under Music 182a.		
Music 373b	Principal Instrument VI*	2-1-5	Music 283b	Chamber Music Ensemble IV	1-3-0
See description under MUS 173b. <i>Co-requisite with MUS 381b, 383b, 385b, 387b.</i> <i>Open to Performance Honours in Music only</i>			See description under Music 182a.		
Music 475	Recital*	6-1-14	Music 284a	Jazz/Improvisation Workshop III	1-3-0
A full recital is to be given by the Honours student in performance. A written work on a topic chosen by the student in consultation with the Department must also be submitted. Admission by audition only. <i>Participation in studio classes is also required and attendance at Music Department recitals required.</i> <i>Open to Music Honours Students only who have successfully completed MUS 373 with a grade of at least 80%.</i>			See description under Music 184a.		
<i>*A supplementary instruction fee is levied for all performance courses. Please see fee schedule "Music Practicum" under "Other Fees."</i>			Music 285b	Jazz/Improvisation Workshop IV	1-3-0
			See description under Music 184a.		
			Music 286a	Chamber Orchestra III	1-3-0
			See description under Music 186a.		
			Music 287b	Chamber Orchestra IV	1-3-0
			See description under Music 186a.		
			Music 288a	Rock/Pop Band III	1-3-0
			See description under Music 188a.		
			Music 289b	Rock/Pop Band IV	1-3-0
			See description under Music 188a.		
			Music 380a	Choral Ensemble V	1-3-0
			See description under Music 180a.		
			Music 381b	Choral Ensemble VI	1-3-0
			See description under Music 180a.		
			Music 382a	Chamber Music Ensemble V	1-3-0
			See description under Music 182a.		
			Music 383b	Chamber Music Ensemble VI	1-3-0
			See description under Music 182a.		
			Music 384a	Jazz/Improvisation Workshop V	1-3-0
			See description under Music 184a.		
			Music 385b	Jazz/Improvisation Workshop VI	1-3-0
			See description under Music 184a.		
			Music 386a	Chamber Orchestra V	1-3-0
			See description under Music 186a.		
			Music 387b	Chamber Orchestra VI	1-3-0
			See description under Music 186a.		
			Music 388a	Rock/Pop Band V	1-3-0
			See description under Music 188a.		
			Music 389b	Rock/Pop Band VI	1-3-0
			See description under Music 188a.		

ENSEMBLE

Students may perform in more than one ensemble but may only register for one in any given semester.

Students outside the Music program may also participate in Ensembles and are encouraged to join. See the Music Department chair for audition details.

Music 180a **Choral Ensemble I** **1-3-0**
Large choral group that explores repertoire from the 17th through the 20th century. Choral ensemble is required for all incoming music students except those accepted into MUS 182a, MUS 184a or 186a. Admission by audition only.

Music 181b **Choral Ensemble II** **1-3-0**
See description under Music 180a. Normally the second semester features a programme of more Popular Music.

Philosophy

Knowledge of the philosophical tradition is essential to a sound and liberal education. It lies at the heart of what Bishop's has understood historically and continues to embrace today as its educational mission.

In recognition of this, the Department of Philosophy offers a program designed to meet the needs of both specialists and those seeking to supplement their work in other disciplines. Honours and Majors follow a curriculum which emphasizes three broad areas: World Philosophy, Continental European Philosophy and the Western Philosophical Tradition. Advanced students may also pursue independent studies of special topics in greater depth. These offerings are supplemented by a series of introductory and cross-disciplinary courses designed to provide the background, skills and tools for a thoughtful, critical approach to a wide variety of problems and issues and delivered, for the most part, at a level accessible to the non-specialist.

The Program

The requirement for a Major in Philosophy is 48 credits. An Honours consists of 60 credits. Candidates for the Honours program must obtain an average of 70% on the best 60 credits in Philosophy in order to graduate with the Honours degree. In addition, these students will be required to write an Honours thesis (Philosophy 401, 6 credits). For Liberal Arts Majors pursuing a Concentration in Philosophy the requirement is 36 credits. A minor consists of any 24 credits in philosophy.

Honours and Majors in Philosophy must have the following courses:

Any 3 of LIB 210 Eros, Love and Desire

LIB 211 Empire

LIB 212 Let Justice Roll

LIB 213 The Abuse of Beauty

LIB 214 The Human Will and Nature

LIB 215 Ecstasy and Excess

LIB 216 Ultimate Concern

Any 3 of PHI 140 Introduction to Ethics

PHI 152 Introduction to Logic and Reasoning

PHI 160 Introduction to Existentialism

PHI 170 Introduction to Philosophy of Being

PHI 171 Introduction to Philosophy of Knowledge

All 4 of PHI 271 Socrates and Plato

PHI 272 Aristotle

PHI 260 Kant

PHI 254 Analytic Philosophy

Liberal Arts Honours and Majors with a Concentration in Philosophy must have the following courses:

Any 3 of PHI 140 Introduction to Ethics

PHI 152 Introduction to Logic and Reasoning

PHI 160 Introduction to Existentialism

PHI 170 Introduction to Philosophy of Being

PHI 171 Introduction to Philosophy of Knowledge

All 4 of PHI 271 Socrates and Plato

PHI 272 Aristotle

PHI 260 Kant

PHI 254 Analytic Philosophy

Any 2 of PHI 263 Hegel

PHI 265 Nietzsche

PHI 267 Heidegger

PHI 362 Phenomenology

PHI 364 Postmodernism

PHI 366 Critical Theory

The remaining 9 credits may be either Philosophy courses or Philosophy cognates (excluding Liberal Arts Philosophy cognates).

Philosophy Courses

General Introduction, Thesis and Independent Studies

PHI 140 Introduction to Ethics

PHI 152 Introduction to Logic and Reasoning

PHI 160 Introduction to Existentialism

PHI 170 Introduction to the Philosophy of Being

PHI 171 Introduction to the Philosophy of Knowledge

PHI 207 Independent Study I

PHI 208 Independent Study II

PHI 307 Independent Study III

PHI 308 Independent Study IV

PHI 401 Honours Thesis (6 credits)

World Philosophy

PHI 254 Analytic Philosophy

PHI 255 North American Philosophy *

PHI 256 Asian Philosophy *

PHI 258 Indian Philosophy *

PHI 355 Analysis Seminar *

Continental European Philosophy

PHI 263 Hegel

PHI 265 Nietzsche *

PHI 267 Heidegger *

PHI 362 Phenomenology *

PHI 364 Postmodernism *

PHI 366 Critical Theory *

The Western Philosophical Tradition

PHI 270 The Pre-Socratics *

PHI 271 Socrates and Plato

PHI 272 Aristotle

PHI 275 The Rationalists *

PHI 276 The Empiricists *

PHI 278 The Pragmatists *

PHI 370 Hellenistic Philosophy *

PHI 371 Medieval Philosophy *

PHI 374 Spinoza *

PHI 375 Kant

Problems, Special Interests and Service Courses

PHI 240 Topics in Business Ethics *

PHI 241 Philosophy and Sexuality *

PHI 243 Philosophy of Language and Hermeneutics *

PHI 244 Philosophy of Mind *

PHI 245 Philosophy of Science *

PHI 246 Philosophy of Art *

PHI 247 Philosophy and Film *

PHI 248 Philosophical Foundations of Feminism *

PHI 342 Seminar in Social and Political Philosophy

PHI 344 Metaphysics *

GENERAL INTRODUCTION, INDEPENDENT STUDIES AND THESIS

Philosophy 140b	Introduction to Ethics	3-3-0
Discussion of some of the basic issues of ethics, including the nature of the will and the relation of self to society.		
Philosophy 152	Introduction to Logic and Reasoning	3-3-0
This course introduces students to the history and practice of traditional syllogistic and modern formal logic. The principle texts are Aristotle's <i>Prior Analytics</i> and Wittgenstein's <i>Tractatus</i> .		
Philosophy 160a	Introduction to Existentialism	3-3-0
A survey of 20th century existential philosophy, with emphasis on the French tradition, drawing on works of Sartre, Camus and Marcel.		
Philosophy 170a	Introduction to Philosophy of Being	3-3-0
Discussion of the foundations of western metaphysics through the study of philosophers such as Plato, Aristotle, Aquinas, Spinoza and Hegel.		
Philosophy 171b	Introduction to Philosophy of Knowledge	3-3-0
Discussion of the character of knowledge and perception, including topics such as the character of judgment, induction and deduction, identity and difference etc.		
Philosophy 172b	Introduction to Social and Political Philosophy	3-3-0
Since the execution of Socrates by the Athenian government in 399 B.C.E. the Western philosophical tradition has reflected seriously on the character of human community and the relationship of philosophy to it. This course will introduce the key themes of this long tradition of philosophical insight. Especially as they pertain to the key institutions of community life: family, civil society and state.		
Philosophy 207a	Independent Study I	3-3-0
Philosophy 208b	Independent Study II	3-3-0
Philosophy 307a	Independent Study III	3-3-0
Philosophy 308b	Independent Study IV	3-3-0
Philosophy 401f	Honours Thesis	6 credits

WORLD PHILOSOPHY

Philosophy 254	Analytic Philosophy	3-3-0
Introduction to 20th century analytic philosophy drawing on works of Moore, Russell, Wittgenstein, Quine, Ayer, Strawson and Armstrong.		
Philosophy 255	North American Philosophy*	3-3-0
This course examines the ways in which 'old world' philosophical trends – in idealism, phenomenology and postmodernism for example – have been appropriated and transformed by thinkers in Canada and the United States over the past two centuries.		
Philosophy 256	Asian Philosophy*	3-3-0
This course introduces students to some of the principle thinkers of the Chinese and Japanese philosophical traditions with special attention to the founding contributions of Confucius and Lao Tzu.		
Philosophy 258	Indian Philosophy*	3-3-0
This course introduces students to some of the principle themes and texts of the Indian philosophical tradition with special attention to the Upanishads and the Bhagavad Gita.		
Philosophy 355	Analysis Seminar*	3-3-0
An in depth study of one of the major contributions to analytic philosophy (e.g. Strawsons Individuals, Quine's Word and Object, or Geach's Reference and Generality). <i>Prerequisite: 254a</i>		

CONTINENTAL EUROPEAN PHILOSOPHY

Philosophy 263b	Hegel	3-3-0
A study of Hegel's <i>Phenomenology of Spirit</i> with reference especially to the dialectical method and the origin of the philosophy of history.		
Philosophy 265b	Nietzsche*	3-3-0
This course examines the development of Nietzsche's aesthetic, ethical and political views. Text include <i>The Birth of Tragedy</i> , <i>The Gay Science</i> , <i>Beyond Good and Evil</i> and <i>The Genealogy of Morals</i> .		
Philosophy 267	Heidegger*	3-3-0
This course surveys the long career of Martin Heidegger with special attention of his analysis of human being, his articulation of a post-metaphysical philosophy and his pioneer work in environmental philosophy.		

Philosophy 362a	Phenomenology*	3-3-0
An in depth study of one of the major contributions to phenomenology (e.g. Husserl's <i>Logical Investigations</i> , Heidegger's <i>Being and Time</i> , Merleau-Ponty's <i>Phenomenology of Perception</i>).		
Philosophy 364b	Post-Modernism*	3-3-0
Discussion of recent philosophical critiques of modernity with reference especially to the question of whether the intellectual and social/political movements which have shaped the modern world give that world the resources for understanding itself genuinely. Texts will be drawn from Heidegger, Foucault and Deleuze and Derrida.		
Philosophy 366	Critical Theory*	3-3-0
This seminar course will explore the development of Critical Theory from its roots in dialectical philosophy (especially Hegel and Marx), to its appropriation of psychoanalysis (especially Freud and Lacan), to its engagement with contemporary politics, society and art. Authors studied may include Walter Benjamin, Theodor Adorno, Max Horkheimer and Herbert Marcuse. <i>Pre-requisite: At least one course in Philosophy.</i>		

THE WESTERN PHILOSOPHICAL TRADITION

Philosophy 270a/		
Classical Studies 270a	The Pre-Socratics*	3-3-0
An in depth study of the origins of philosophy in the West with special attention to Anaximander and Heraclitus, Pythagoras and Parmenides, Leucippus and Democritus.		
Philosophy 271a/		
Classical Studies 271a	Socrates & Plato	3-3-0
A study of the character and teaching of Socrates as portrayed in Plato's early and middle dialogues. Emphasis will be on theory of education.		
Philosophy 272b/		
Classical Studies 272b	Aristotle	3-3-0
A study of selected works of Aristotle with special emphasis on logic, metaphysics, and the concept of substance.		
Philosophy 275a	The Rationalists*	3-3-0
A study of selected works of Descartes and/or Leibniz.		
Philosophy 276b	The Empiricists*	3-3-0
A study of the empiricist philosophers of the 17th and 18th centuries, with reference especially to theories of perception and knowledge, drawing on texts from Hobbes, Locke, Berkeley, and Hume.		
Philosophy 278b	The Pragmatists*	3-3-0
A study of selected works of Pierce, James and Dewey.		
Philosophy 370a/		
Classical Studies 370a	Hellenistic Philosophy*	3-3-0
A study of selected Epicurean, Stoic, Skeptical and Neo-Platonic texts with reference especially to development of a philosophy of emotions and the elaboration of a systematic metaphysics.		
Philosophy 371a	Medieval Philosophy*	3-3-0
Exploration of the treatment of a range of philosophical issues prior to the Renaissance including: arguments for the existence of God, the relation between reason and revelation, the question of the eternity of the world, and the status of the universals. Texts will be drawn from Augustine, Boethius, Eriugena, Anselm, Alfarabi, Avicenna, Averroes, Bonaventure, Siger of Brabant and Aquinas.		
Philosophy 374b	Spinoza*	3-3-0
An in depth study of Spinoza's <i>Ethics</i> with reference especially to the novelty of its method, its relation to philosophies of the tradition and its subsequent influence.		
Philosophy 375 Kant	3-3-0	
Consideration of epistemological and ethical issues in Kant's first two Critiques.		

PROBLEMS, SPECIAL INTERESTS AND SERVICE COURSES

Philosophy 240a	Topics in Business Ethics*	3-3-0
An examination of ethical issues and responsibilities in the field of business surveying contemporary and traditional ethical theory and undertaking case studies of contemporary issues.		
Philosophy 241	Philosophy and Sexuality*	3-3-0
Discussion of traditional theories of love and desire as a prelude to study of some contemporary theories of gender, sexuality and sexual politics.		

Philosophy 243 Philosophy of Language and Hermeneutics* 3-3-0

This course will focus on the development of the Hermeneutic philosophy of language whose origin dates to the late 18th century. The major figures studied will include Schleiermacher, Dilthey, Heidegger and Gadamer.

Philosophy 244 Philosophy of Mind* 3-3-0

Theories of mind including those developed by Aristotle, Descartes, Hume, Berkeley, Ryle, Strawson and Armstrong.

Philosophy 245b The Philosophy of Science* 3-3-0

An introduction to some basic issues in the history and philosophy of science with reference especially to: the origin and development of scientific method, the (in)commensurability of scientific paradigms, and the critique of scientific objectivity in contemporary social theory.

Philosophy 246b The Philosophy of Art* 3-3-0

A look at some attempts by major thinkers to account for the nature of art and beauty, focusing on texts of Plato and Aristotle, Kant and Hegel, Nietzsche and Heidegger.

Philosophy 247 Philosophy and Film* 3-3-0

This course will explore key philosophical themes through film. Students will combine viewing and discussion of film with the study of related philosophical texts.

Pre or Co-Requisite: Any course in philosophy or any course in the Film Studies minor.

Philosophy 248a Philosophical Foundations of Feminism* 3-3-0

An introduction to feminist thought from the Enlightenment to the present, looking at some feminist discussions in ethics, theory of knowledge, philosophy of language, and philosophy of science.

Philosophy 249 Philosophy of History* 3-3-0

The course looks at the philosophical treatment of history in thinkers such as Hegel, Marx, Nietzsche and Collingwood.

Philosophy 342 Seminar in Social and Political Philosophy 3-3-0

This course will typically consist of a detailed study of a great work of Western social and political philosophy. Students will be expected to present seminars and do research on the text itself, the social and political context in which it emerged and its implications for all serious inquiry into questions of society and politics.

Philosophy 344b Metaphysics* 3-3-0

An investigation of some basic metaphysical problems. These may include: the question of being, the historical development of metaphysical systems, issues and problems in ontology and epistemology, issues and problems in ontology and logic.

COGNATE COURSES

Fine Arts History 312a, formerly FIN 312a

Français 262a

Environmental Studies and Geography 366b

Liberal Arts 210, 211, 212, 213, 214, 215, 216

Political Studies 323a, 324b, 329b

Psychology 342a, 443b

Sociology 122b, 320

Religion 232a, 233b, 252a, 253b, 330a, 331b

Religion

The study of religion, and Christianity in particular, has been a foundational part of Bishop's mission since the University's establishment in the mid-nineteenth century. Today, as a department in the Humanities division, we offer a broad range of courses in three major categories.

Courses in "Biblical Studies" invite students to become familiar with the sacred texts of the Jewish and Christian traditions, to examine the historical and cultural contexts of their origin and development, and to acquaint themselves with the critical, analytical, theoretical and historical tools for inquiry into these texts.

"World Religions" courses offer a knowledge of the sacred texts, traditions, rituals, beliefs and practices of the world's major religions.

Students will come to appreciate the richness and depth that characterize these religions, which have elicited devotion from persons in every time and place.

The courses in the third category, "Approaches, Perspectives and Expressions," reflect the fact that religions and religious life do not exist in a vacuum, but are linked to other aspects of human life, including philosophical thought, psychological, social, political, and economic dimensions, and literature and fine arts.

Because religions have significantly influenced, and been influenced by, the political, artistic, intellectual, social, and economic life of cultures throughout history, the academic study of religion is an interdisciplinary pursuit. Students taking an Honours or Major program in Religion are encouraged to take courses in other, related fields, and conversely, students in other disciplines are welcomed in Religion courses in order to round out their understanding of their areas of concentration.

Persons may study religion to prepare for their chosen vocation or for graduate study. While this may be in anticipation of some form of ministry or teaching, it is not uncommon for students planning on entering other professions — social work, law, theatre, music, business, etc. — to study religion in order to enhance their vocational and personal life.

The Program:

Honours: Students usually take the Religion Honours program if they plan to pursue graduate work. For an Honours degree, 60 credits in Religion, with an average of at least 70% as calculated from the best 60 credits in the program (including cognates), is required. Students have the option of writing an Honours thesis in their final year.

Major: 48 credits in Religion.

Minor: 24 credits in Religion.

Honours and Majors are also required to fulfill the following minimum distribution requirements (36 credits; see the course lists for course descriptions):

Biblical Studies: 12 credits consisting of: 112a, 118a, 214b, 215b, 218a, 219b

World Religions: 12 credits, including: Rel100a and Rel101b, plus 6 credits from: 124a, 125b, 126a, 127b

Approaches, Perspectives and Expressions: 12 credits, including: 232a and 233b

OR

330a and 331b

Religion Concentrations in Liberal Arts

Liberal Arts students can choose any of three Religion Concentrations. In addition to meeting the requirements for the Liberal Arts Major, the specific requirements for a Religion Concentration within Liberal Arts are a total of 36 credits in Religion, of which a minimum of 24 credits must consist of courses selected from the appropriate list below.

Concentration: The Judaic and Christian Traditions (select minimum of 8 courses)

100 Introduction to Religion I

101 Introduction to Religion II

112 Introduction to the Hebrew Bible/Old Testament

118 From Creation to Covenant:

The First Five Books of the Bible

- 126 World Religions V: Judaism
- 214 Israelite Mythology and Cultic Practice
- 215 History and Legend in the Hebrew Bible/Old Testament
- 218 Early Christian Literature I
- 219 Early Christian Literature II
- 232 Philosophy of Religion I
- 233 Philosophy of Religion II
- 256 History of Christianity
- 257 History of Christianity II
- 252 Christian Thought I
- 253 Christian Thought II

Concentration: World Religions

(select minimum of 8 courses)

- 100 Introduction to Religion I
- 101 Introduction to Religion II
- 112 Introduction to the Hebrew Bible/Old Testament
- 118 From Creation to Covenant:
The First Five Books of the Bible
- 122 World Religions I: Ancient Mediterranean Religions
- 124 World Religions III: Hinduism
- 125 World Religions IV: Buddhism
- 126 World Religions V: Judaism
- 127 World Religions VI: Islam
- 239 The Origins of Religion and Spiritualism in Ancient Times
- 256 History of Christianity
- 257 History of Christianity II

Concentration: Religion and Culture

(select minimum of 8 courses)

- 100 Introduction to Religion I
- 101 Introduction to Religion II
- 112 Introduction to the Hebrew Bible/Old Testament
- 124 World Religions III: Hinduism
- 125 World Religions IV: Buddhism
- 126 World Religions V: Judaism
- 127 World Religions VI: Islam
- 146 Women in Religion
- 148 Psychology of Religion
- 149 Sociology of Religion
- 200 Religion and Politics
- 207 Religion and Sex
- 214 Israelite Mythology and Cultic Practice
- 215 History and Legend in the Hebrew Bible/Old Testament
- 236 Death and Dying in the Ancient World
- 237 Religion and Film

RELIGION COURSES

Biblical Studies

- 112a Introduction to the Hebrew Bible / Old Testament
- 114a Biblical Hebrew I
- 115b Biblical Hebrew II
- 118a From Creation to Covenant: First Five Books of the Bible
- 214b Israelite Mythology and Cultic Practice
- 215b History and Legend in the Hebrew Bible / Old Testament
- 218a Early Christian Literature I
- 219b Early Christian Literature II
- 311b Advanced Study in Biblical Texts
- 328a Christian Origins I
- 329b Christian Origins II

World Religions

- 100a Introduction to Religion I
- 101b Introduction to Religion II
- 122a World Religions I: Ancient Mediterranean Religions
- 123b World Religions II: Christianity
- 124a World Religions III: Hinduism
- 125b World Religions IV: Buddhism
- 126a World Religions V: Judaism
- 127b World Religions VI: Islam

Approaches, Perspectives and Expressions

- 107a Introduction to Biblical Archaeology
- 109a Egypt and Mesopotamia: From the Rise of Civilization to
the Persian Conquest
- 116 Archaeology in the Holy Land (Summer course in Jordan)
- 146a Women in Religion
- 148a Psychology of Religion
- 149b Sociology of Religion
- 207 Religion and Sex
- 232a Philosophy of Religion
- 233b Philosophy of Religion II
- 236a Death and Dying in the Ancient World
- 237a Religion and Film
- 252a Christian Thought I
- 253b Christian Thought II
- 256a History of Christianity
- 257b History of Christianity II
- 330a Issues and Problems in Religion I
- 331b Issues and Problems in Religion II

Independent Studies

- 300a Independent Studies I
- 301b Independent Studies II
- 402f Honours Thesis

BIBLICAL STUDIES

Religion 112a Introduction to the Hebrew Bible/Old Testament 3-3-0
An introduction to the Hebrew Bible/Old Testament and to its modern study. The course will acquaint students with the books, characters, themes, narratives, and history of the Hebrew Bible.

Professor Miller

Religion 114a Biblical Hebrew I 3-3-0
Introduction to biblical Hebrew grammar, and reading of simple texts.

Professor Miller

Religion 115b Biblical Hebrew II 3-3-0
More advanced biblical Hebrew grammatical concepts, and study of more involved texts.

Professor Miller

**Religion 118a From Creation to Covenant:
The First Five Books of the Bible 3-3-0**

An introduction to the first five books of the Hebrew Bible/Old Testament (Genesis, Exodus, Leviticus, Numbers and Deuteronomy) and to their modern study. The course will acquaint students with the characters, themes, and narratives of these foundational books, known collectively as the Torah/Pentateuch.

Professor Miller

Religion 214b Israelite Mythology and Cultic Practice 3-3-0

An examination of mythology and cultic practices within Israelite society, as reflected in the Hebrew Bible/Old Testament. Extra-biblical texts and archaeological evidence will be used to contextualize the biblical material. Topics include: Creation, the origin of evil, monotheism and polytheism, goddess worship, magic, and human sacrifice.

Professor Miller

Religion 215b History and Legend in the Hebrew Bible/Old Testament 3-3-0

An examination of historical accounts concerning the Israelites in the Hebrew Bible/Old Testament, with a view to assessing their historicity (i.e., historical authenticity). Extra-Biblical texts and archaeological evidence will be used to contextualize the biblical material and to evaluate its claims. Topics include: the Patriarchs (Abraham, Isaac and Jacob), Joseph in Egypt, the Exodus, the Israelite settlement in Canaan, David and Goliath, and the United Monarchy under David and Solomon.

Professor Miller

Religion 218a Early Christian Literature I 3-3-0

A seminar which introduces early gospels (both canonical and non-canonical), examined within the historical context of the Graeco-Roman world during the first and second centuries CE. Distinctive features and characteristics of each text will be examined in order to gain insight into their historical, social and political environments.

Professor Murray

Religion 219b Early Christian Literature II 3-3-0

A seminar which examines the life and teachings of Paul as reflected in the early Christian literature likely written by him, in his name and about him. Through investigation of the distinctive characteristics of the texts, insight will be gained into Paul's views on justification, faith, the Jewish law, the Jewish people, the role of women in the early church, and upon his impact on the emergence of Christianity in the Roman Empire.

Professor Murray

Religion 311b Advanced Study in Biblical Texts 3-3-0

Close study of selected biblical texts with special reference to context and reinterpretation.

A seminar course

Religion 328a Christian Origins I 3-3-0

This seminar course surveys the diverse portraits of Jesus of Nazareth reflected in early Christian literature, in the modern scholarly quest for the historical Jesus, and in film. The social and cultural forces that forged the earliest images of Jesus will be examined.

Prerequisite: REL218a OR 219b or permission of the instructor.

Professor Murray

Religion 329b Christian Origins II 3-3-0

A seminar which explores a variety of Christian and Jewish texts in order to understand the complex relationship between Judaism and Christianity, within the broader historical context of the Roman Empire.

Prerequisite: REL218a OR 219b or permission of the instructor.

Professor Murray

WORLD RELIGIONS**Religion 100a Introduction to Religion I 3-3-0**

An introduction to the academic study of religion, focusing on Western religious traditions (Zoroastrianism, Judaism, Christianity and Islam). In addition to addressing the historical evolution, religious practices, writings, fundamental concepts, beliefs and cultural expressions of each of these traditions, the course will also consider methodological issues pertaining to the study of religion as an academic discipline.

Professor Miller

Religion 101b Introduction to Religion II 3-3-0

An introduction to the academic study of religion, focusing on Eastern religious traditions (Hinduism, Buddhism, Jainism, Sikhism, and Shinto). In addition to addressing the historical evolution, religious practices, writings, fundamental concepts, beliefs and cultural expressions of each of these traditions, the course will also consider methodological issues pertaining to the study of religion as an academic discipline.

Professor Miller

Religion 122a World Religions I: Ancient Mediterranean Religions 3-3-0

An introduction to Mediterranean religions from the time of Alexander the Great (356-323 BCE) to the emergence of Christianity as a prominent Roman religion in the late second century CE, including Mystery religions, Zoroastrianism, Judaism, Mithraism, popular philosophical expressions of piety such as Stoicism and Epicureanism, as well as different forms of divination such as astrology, magic, dream analysis and alchemy.

Professor Murray

Religion 123b World Religions II: Christianity 3-3-0

An introduction to Christianity as a religious system: a survey of its foundational myths and figures, religious and moral teachings, rituals, sacred texts and places and attitudes toward other religions.

Religion 124a World Religions III: Hinduism 3-3-0

A study of Hinduism in its infinite variety from earliest times to the present. Topics include: the Indus-Valley Civilization; early Vedic religion, its myths and gods; the Upanishads; Brahmanism; the Ramayana and the Bhagavad Gita; caste and religion; worship; Vaishnavism, Saivism and the mother goddess.

Religion 125b World Religions IV: Buddhism 3-3-0

The origins of Buddhism in its native India and its spread throughout many countries of the East. The relationship of Buddhism to Hinduism and Jainism; the development of the Order, principal teachings and practices; meditation; ritual; study of major writings; modern developments.

Religion 126a World Religions V: Judaism 3-3-0

An introduction to the history, literature, ideas and practices of Judaism from its biblical origins to the present. Topics include: the major festivals and high, holy days; Torah and Talmud, mitzvah and midrash; philosophers of Judaism; kabbalah and the mystical tradition; Temples and synagogues; Rabbinic Judaism; Orthodox, Conservative and Reform; dietary and religious practices; women and the rabbinate; rites of passage; the Holocaust; Judaism and Israel; messianism.

Religion 127b World Religions VI: Islam 3-3-0

The history, literature, ideas and practices of Islam from its origins to the present. Attention is focussed on pre-Islamic Arabia; the life, example and practices of the Prophet; Muhammad the Qur'an; the caliphate and the umma; Sunnah and Hadith; the Five Pillars; worship; the Shariah, Sufism and the mystical tradition; Sunni and Shica; women in Islam; art and architecture in Islam; Islam and modernity.

Religion 239b The Origins of Religion and Spiritualism in Ancient Times 3-3-0

This course will trace the development of spiritual and religious beliefs from the Upper Paleolithic period (Old Stone Age) through the origins of seed agriculture and animal domestication in the Neolithic period, to the rise of cities and civilization about 5000 years ago. The course will begin by discussing the nature of spiritualism and religion, and then continue with an overview of the evidence for the spiritual and religious and practices of our more recent ancient hominid ancestors, Homo sapiens neanderthalensis and Homo sapiens sapiens. The last part of the course will concentrate on the way religious beliefs changed from the time of Stone Age hunters and gatherers, who lacked writing and worshiped in natural settings, to the first urban dwellers who worshipped in shrines and great temples and were able to record their religious beliefs and practices.

APPROACHES, PERSPECTIVES AND EXPRESSIONS**Religion/Classical Studies 107a****Introduction to Biblical Archaeology 3-3-0**

This course is an introduction to the methods and terminology of archaeology used in the eastern Mediterranean region of Syria-Palestine. Students will gain some familiarity with the methods and techniques of archaeological research, and an overview will be provided of the material remains of the cultures of Syria-Palestine (including the ancient Israelites, Philistines, Canaanites, Moabites and others), in order to illuminate the religious beliefs, art and cultural activities of these groups in the centuries preceding the Christian era.

Religion/Classical Studies 109a**Egypt and Mesopotamia: From the Rise of Civilization to the Persian Conquest 3-3-0**

The region of Mesopotamia (modern Iraq) saw the development of the first complex urban society more than 5000 years ago. About the same time, a second complex society, Egypt, was forming along the banks of the Nile River in Africa. Employing a mixture of historical texts and archaeological research, this course will give an overview of ancient Egypt and Mesopotamia covering the time from the Neolithic Period (ca. 8500 BCE) to the Persian conquest in the sixth century BCE. It will begin with the formation of the first civilizations, the development of agriculture, writing, cities and major building projects in the form of temples and pyramids. In addition to examining the lives and political careers of important historical characters, the course will also explore the religious beliefs, and techniques of astronomy, medicine and warfare prevalent at the time.

Religion 116 (Classical Studies 241ab)**Archaeology in the Holy Land: Archaeological Field Methods 6-6-0**

Students registered in this course will participate in a six-week archaeological expedition to Jordan. Working under the supervision of professional archaeologists, students will be involved in the excavation and recording of artifacts recovered at Khirbat al-Mudayna, Jordan as part of the Wadi Ath-Thamad Excavation Project. Students will learn to take elevations, draw top plans and balk sections, write daily, and weekly field

reports, and related activities. During the season, students will take part in the educational program of the expedition, which will include seminars, lectures by visiting scholars on the archaeology and history of Jordon, plus field trips to museums, neighbouring excavations and major sites.

Religion 146a Women in Religion 3-3-0

An investigation of the religious lives of early pagan, Jewish and Christian women in the context of the Graeco-Roman world. Literary and epigraphical sources from the fourth century BCE to the third century CE are analyzed in order to determine women's roles, rites and practices, with special attention to constructions of gender in the Graeco-Roman world.

Professor Murray

Religion 148a Psychology of Religion 3-3-0

An introduction to major theoretical approaches to the psychological understanding of religion: pragmatism (James), Psychoanalysis (Freud, Jung, Erikson) and Humanism (Allport, Maslow).

Professor White

Religion 149b Sociology of Religion 3-3-0

An introduction to the understanding of religion as a social phenomenon: a discussion of the views of Ludwig Feuerbach, Karl Marx, Emil Durkheim, Max Weber, Peter Berger and Robert Bellah.

Professor White

Religion 200b Religion and Politics 3-3-0

This course examines the intersection between extremist religious beliefs and political power, predominantly but not exclusively those cases in which violence and serious conflict have arisen. Possible topics include radical Zionist settlers in the West Bank, violent Hindu nationalism in India, Christian evangelicals in the United States, Islamist organizations (e.g., Al-Qaeda), the Japanese apocalyptic group Aum Shinrikyo, and the quest to establish Khalistan (an independent homeland in India) by militant Sikhs.

Religion 207 Religion and Sex 3-3-0

The aim of this course is to provide an overview of topics in which issues of sex and sexuality intersect with particular eastern and western religious traditions. The course is selective rather than comprehensive. Topics that could be covered include the following: menstruation and early sexuality; heterosexuality; contraception; homosexuality; same sex marriage; celibacy; asexuality; sex and the sacred, etc. Attitudes, traditions, and regulations pertaining to these topics will be explored from various religious perspectives through readings and films.

Prerequisite: REL100 or 101 or approval of instructor

Religion 232a Philosophy of Religion I 3-3-0

The subject matter of this course consists of philosophical arguments for the existence of God. Lectures and discussions will be based on original texts (in translation): Aquinas' five proofs and the ontological argument in its classical (Anselm) and modern formulations. The modern and much debated argument from design will also be discussed. The class will also learn the standard critiques of those arguments by Hume, Kant, and others. If time allows, this will be followed by an analysis of the problem of evil as counting against belief in the existence of God.

Professor White

Religion 233b Philosophy of Religion II 3-3-0

The course focusses on two issues: (1) the problem of evil – if there is a God who is perfectly good and loving, omnipotent, and omniscient, why do people suffer?; and (2) the problems of religious knowledge, understanding and discourse – what, if anything, can one know of God, is talk of God meaningful and, if so, how? How might religious texts be interpreted and understood? Subjects include the classical theory of analogy, modern empiricism, contextual semantics, and recent hermeneutical (interpretation) theory.

Professor White

Religion 236b Death and Dying in the Ancient World 3-3-0

This course explores the myths, rituals and beliefs associated with death and dying in antiquity. Topics to be covered include myths associated with the afterlife; books of the dead; magic and death rituals; and understandings of heaven, hell and judgement.

Prerequisite: Religion 100a or 101b or 122a or permission of instructor

Professor Murray

Religion 237a Religion and Film 3-3-0

This course employs film to study religion, and religion to study film. Different genres of film will be used to explore various issues, dimensions and expressions of religion, while images, metaphors and teachings found in religion will be employed to illuminate the material portrayed in film.

Professor Murray

Religion 252a Christian Thought I 3-3-0

This is a seminar course in which some of the major works in the development of Christian thought from the fifth century CE to the Reformation are read and discussed: e.g., works by Augustine, Boethius, Bonaventure, Aquinas, etc. Students prepare and present papers to the class.

Professor White

Religion 253b Christian Thought II 3-3-0

This seminar course examines important and representative Christian views from the Reformation to the present as expressed by e.g., Luther, Calvin, the Council of Trent, Schleiermacher, Vatican Councils 1 and 2, Tillich, feminist and liberation theologians, etc. Students prepare papers and present them to the class.

Professor White

Religion/

Classical Studies 256a History of Christianity 3-3-0

Historical survey of early Christianity: its origin and spread as a Roman religion; developments in its thought, practices, canonical writings, offices and institutions, self-definition in response to internal challenges (heresies) and external critique and hostility; the impact of Constantine; the East-West split.

Professor Murray

Religion 257b History of Christianity II 3-3-0

Historical survey of Christianity from the medieval era to the present: development as a European religion; the Crusades; renewal and reformation movements; colonialism and the spread of Christianity beyond Europe; contemporary Christianities.

Professor Murray

Religion 330a Issues and Problems in Religion I 3-3-0

A seminar in which students prepare and present papers on selected issues and texts in theology and the philosophy of religion. The subjects are analyzed and discussed by the class. It is recommended that students enrolled have previously taken courses in religion or philosophy.

Professor White

Religion 331b Issues and Problems in Religion II 3-3-0

A seminar in which students prepare and present papers on selected issues and texts in theology and the philosophy of religion. The subjects are analyzed and discussed by the class. It is recommended that students enrolled have previously taken courses in religion or philosophy. However, students need not have taken Religion 330a in order to take this course.

Professor White

INDEPENDENT STUDIES

Religion 300a Independent Studies I 3-3-0

Religion 301b Independent Studies II 3-3-0

Religion/Music 312ab Independent Study in Performance, Liturgy, and Music 3-3-0

This course is designed for student musicians performing services at St. Mark's Chapel, and may be taken for credit in either Music or Religion. Its purpose is to acquaint the student with the historical and contemporary liturgical traditions of the Church of England, and of the musical repertoire which they embrace. It will be taught by members of the two departments, in consultation with the chaplain of St. Mark's.

Religion 402f Honours Thesis 6-3-0

A full-year (two-semester) course in which the student does guided research into a subject, produces a written thesis, and, when completed, gives an oral defense of the thesis.

Prerequisite: Departmental acceptance of the thesis proposal.

Cognate Courses

Designated courses in Classical Studies, History, Music, Philosophy, Political Studies (consult the department chair for course list), and other such courses as the department shall recognize.

Natural Sciences and Mathematics

The Division of Natural Sciences and Mathematics consists of six academic units, and offers a diverse range of courses, programs and degrees within these disciplines. The Division also hosts several interdisciplinary programs across these disciplines and jointly with other academic units in the University. The Division hosts or co-hosts programs of study leading to the Masters of Science (M.Sc.), Bachelor of Science (B.Sc.), Bachelor of Commerce and Science (B.C.S.), and Bachelor of Arts (B.A.) degrees. Each academic unit offers degree programs at various levels of specialization: Honours, Major, Concentration, Minor (listed from most to least specialized). Several Certificate programs are also offered.

Master's of Science degree programs are directed to those students who already possess a Bachelor's degree of high standing, and wish to pursue advanced studies and research in a specialized field of science under the supervision of a Bishop's research scientist or mathematician. The Bishop's M.Sc. degree requires students to compose and defend a research thesis, and prepares students for Ph.D. studies.

Honours programs are directed to those students intending to pursue graduate studies to earn masters or doctoral degrees. Students are normally admitted to the various Bachelor's degree programs within the Division as **Majors**. In their upper years of study, those who wish the highest level of specialization and are achieving the academic standard set for the program may apply for the Honours specialization. Some Honours and Majors programs require the student to select a **Concentration** area within the discipline, while other Majors programs can be flexibly combined with a Major in another discipline within the Division or from another Division or School in the University. Students pursuing two Majors are said to be "double majors". All science students are encouraged, at the least, to combine their Honours or Major program of studies with a **Minor** program from another discipline, science or otherwise. The least specialized program of studies eligible for a Bachelor's degree from the University is a "double minor" program of at least two Minors. **Certificate** programs require ten courses equal to at least 30 credits. Credits in a Certificate program may be transferred to a degree program.

Students enrolled in the experimental science classes receive extensive laboratory experience. Laboratories are well equipped and laboratory courses are instructed by the regular faculty. Each department has its own computer facilities and dedicated study rooms. Laboratories and classes tend to be small (often less than 20) and students are able to obtain essential feedback from Professors throughout their studies. The Division also offers students free help in leaning mathematics, physics and statistics, through its drop-in centers, the **Math-Stats Help Center**, and the **Physics Help Center**, both staffed by professional tutors and aided by upper year and graduate students. Last year was the grand opening of the Bishop's University Astronomical Observatory, now available for graduate and undergraduate research and public viewing

Graduates from the Division pursue careers in many diverse fields. In recent years these careers have included medicine, veterinary medicine, dentistry, biomathematical research, engineering, actuarial science, statistics, software engineering, pharmacology, physiotherapy, secondary and primary school science teaching and the chemical industry, to name a few.

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Overview of Programs Offered

Master's of Science Degree Programs, M.Sc.

Programs Offered: Chemistry, Computer Science, Physics

The Division of Natural Sciences and Mathematics has M.Sc. programs in the discipline of Chemistry, Computer Science and Physics. The programs of study are research based and require the student to compose and orally defend a research thesis, under the close, mentoring supervision of a faculty scientist with expertise in the thesis field. Normally the program completion requires full-time, year-round registration for two academic years (20 months).

The Department of Chemistry offers expertise in Materials Science. Dr. Mihai Scarlete's work, together with financial support of venture partners, has resulted in the University's first spin-off company, SiXtron. The chemistry research laboratories' modern instruments include a Bruker ARX-400 NMR spectrometer.

The Computer Science Department offers expertise in imaging and algebraic topology (Dr. Madjid Allili), computer vision (Dr. Layachi Bentabet) and concurrent and real-time systems (Dr. Stefan Bruda). Bishop's faculty are members in the research group Groupe MOdélisation en Imagerie, Vision, et REseaux de neurons (MOIVRE) at the University of Sherbrooke. The Department has a dedicated research laboratory for imaging and computer vision, to complement its general access LINUX laboratory.

The Department of Physics hosts a Tier I Canada Research Chair in Astrophysics. Dr. Lorne Nelson's research studies close, interacting binary stars. With financial support from the Canada Foundation for Innovation, the Quebec Ministry of Education, Bishop's and private sector partners, Dr. Nelson has developed the Bishop's University Interacting Binary Evolution Server, dedicated to the computation of evolutionary tracks for low-mass interacting binaries containing compact objects. The Department also offers expertise in cosmology (Dr. Valerio Faraoni), theoretical solid-state physics and magnetism (Dr. Walter Stephan) and gravitation theory (Dr. A. Edery). October, 2006 saw the grand opening of the new Bishop's University Astronomical Observatory, available for graduate and undergraduate research and public viewing.

Detailed descriptions of the M.Sc. programs, the courses offered and the Departmental regulations governing them, are found under the respective Departmental headings below. See also the **University Regulations** section of this Calendar, under the heading, "Regulations for Graduate Studies in Science".

Bachelor of Commerce and Science Program, B.C.S.

New for 2009-2010, the Division of Natural Sciences and Mathematics jointly hosts an interdisciplinary degree program leading to a **Bachelor of Commerce and Science degree, B.C.S.** The program provides students with a broad-based, modern education. Students simultaneously pursue studies in two streams: one scientific discipline, and the other in commerce. They develop skills in scientific analysis, effective presentation, and quantitative reasoning while receiving training in the languages of international commerce and advanced science. The result is a rigorous education in two different yet complimentary fields of human activity. B.C.S. graduates will confidently take up careers in environmental consulting, in the biotechnology and biopharmaceuticals industries, as entrepreneurs, technology managers and marketers, personal training and fitness providers, financial advisors, science journalists and writers. B.C.S. grads may also pursue graduate studies in schools of business, applied science, environmental law, journalism, or health fields.

The Program

Students admitted to the B.C.S. program choose one concentration stream of studies (twelve courses) in science or mathematics from the list below, and simultaneously pursue broad-based commerce studies from the Williams School of Business: a six-course "commerce core" and six other Business elective courses. All B.C.S. students also complete a set of cognate courses, designed to provide skills important across both fields of studies, and give opportunity for reflection and discussion of relevant societal issues. In addition, all 3-year students have one free elective course choice, while all 4-year students have three or four free-elective choices, depending on the science or math concentration stream chosen.

Available Science and Mathematics Concentration Streams for the B.C.S.

Applied Mathematics	Environmental Biology
Exercise Science and Sports Studies	Physics
Biochemistry	Physiology
Chemistry	Psychology
Computer Science	Pure Mathematics

A detailed description of this new B.C.S. program is found in the "Multidisciplinary Programs" section of this Calendar under the heading, "Bachelor of Commerce and Science". The detailed description includes the program's admissions criteria and regulations, the "commerce core" course requirements, the cognate course requirements, and the lists of required courses for the Science and Mathematics concentration streams.

Bachelor's Degree Programs: Honours and Majors

The Division of Natural Sciences and Mathematics offers a wide range of programs leading to the Bachelor of Science or Bachelor of Arts degrees with Honours or Majors specialization as outlined in Table I below. Detailed descriptions of these programs, and their required course lists and regulations can be found under the respective Departmental headings in Table I.

Divisional Major Program

For students who are unsure which science discipline they wish to pursue, the Division of Natural Sciences and Mathematics offers an entry-level program which allows students to register initially as **Divisional Majors**. Students may earn credit for any courses offered by the Division, but after completion of a maximum of two semesters of full-time study (or 30-credits attempted), they must enroll in one of the regular programs of study in the University.

Divisional Minors Programs

Biochemistry	Mathematics
Biology	Mathematical Contexts
Chemistry	Environmental Studies*
Computer Science	Physics

**Hosted jointly by the Department of Biological Sciences and the Department of Environmental Studies and Geography.*

Detailed descriptions of these academic minor programs, and their required course lists and regulations can be found under the respective Departmental headings following.

Divisional Certificate Programs

Certificates offered:

- Certificate of Studies in the Discoveries of Science**
- Certificate in Computer Science**
- Certificate in Software Technology**

For further information and how to apply, please consult the **University Regulations** section of this Calendar under the heading, "Regulations governing Certificate Programs". Detailed descriptions of these Certificate Programs and their course lists are found under the heading, "Certificate Program Descriptions and Regulations," below, following the Departmental sections.

Table I

Name of Program	Concentration	Levels of Specialization Available	Degrees Available
Biochemistry	Biology Chemistry	Honours, Major Honours, Major	B.Sc. B.Sc.
Biological Sciences	Molecular Biology and Physiology	Honours, Major	B.Sc.
	Biodiversity, Ecology and Evolution	Honours, Major	B.Sc.
	Neuroscience Major	Honours, Major, jointly with Psychology Dept. B.A.	B.Sc.
Chemistry	Honours, Major	B.Sc.	
Computer Science	Dissertation Honours	Honours	B.Sc.
	Course-based Honours	Honours	B.Sc.
	Imaging and Digital Media	Major	B.Sc.
	Information and Decision Science Major	Major B.Sc.	B.Sc.
Mathematics	Honours, Major	B.Sc., B.A.	
Mathematics Education	double Major with School of Education*		B.Sc., B.A.
Mathematical Economics	Honours, jointly with the Dept. of Economics		B.Sc., B.A.
Physics	Honours, Major	B.Sc.	
Science Teaching	Biology	double Major with School of Education*	B.Sc.
	Chemistry	double Major with School of Education*	B.Sc.
	Physics	double Major with School of Education*	B.Sc.

*The Division of Natural Sciences and Mathematics, in cooperation with the School of Education, offers students in these programs the opportunity to prepare for professional careers as Secondary School science and mathematics educators. Students must also be registered Education majors in the **School of Education**. The specific required course lists and program regulations for these double Major programs are found in the School of Education section of this Calendar. All questions concerning application to the School and course requirements should be referred to the Chair of the School of Education.

Engineering and Liberal Arts Program

The Engineering and Liberal Arts Program is the result of close co-operation between Bishop's University and the Université de Sherbrooke. This exclusive, double-degree program leads simultaneously to two Bachelor's degrees: a B.A. Liberal Arts, from Bishop's University (delivered in English), and a B.ing. (in either Civil or Chemical Engineering), from the Université de Sherbrooke (delivered in French). Students in this program will study at both Universities, in both of Canada's official languages, while benefiting from two unique university cultures.

This innovative joint program is unique in Canada and will produce a new generation of leaders for Quebec and Canadian industrial and public life — bilingual graduates with superb technical expertise coupled with a solid general education. The program trains engineers who will be culturally grounded, critically minded and capable of effective communication in complex situations. Graduates will be professional engineers possessing a firm grounding in political and social issues, with the capability of integrating engineering practice into a broad cultural and historical perspective.

The program is part of a co-operative system that alternates study semesters on campus with paid engineering work internships in the industrial or public sectors. French or English language upgrading is available for students who require it. The normal length of this dual-

degree program is four academic years and one semester for students possessing the appropriate CEGEP D.E.C., with an extra year for those entering from high school systems in the rest of Canada.

Special Entrance Requirements for the Engineering and Liberal Arts Program

Students enter the Engineering and Liberal Arts dual-degree program in one of two ways depending on their high school or collegial diplomas. In both cases, only students of the highest academic standing will be admitted, as admission is strictly limited. Candidates will normally possess strong linguistic skills in both official languages.

The regulations for this dual-degree program, the schedule of studies and work internships, and the Bishop's course lists are found in the Multidisciplinary Programs section of this Calendar under the heading, "Engineering and Liberal Arts Program".

Entrance Requirements: Programs in the Natural Sciences and Math

Students are considered for entry into programs offered by the Division of Natural Sciences and Mathematics after completion of a Québec Collegial Diploma (DEC), grade 12 in other provinces or the U.S.A., or the equivalent level of education from other international origins.

Students applying from a Québec CEGEP will normally be admitted to a three-year program of at least 93 credits. All other students seeking a first Bachelor's degree will normally be admitted to a four-year program of at least 123-credits. A student's total credit requirement depends on the program and the type of degree chosen. However, all Bishop's students must complete the 3-credit, English Writing Proficiency examination (EWP) included in the total credit requirement.

Four-Year Programs

Admission with a High School Diploma

Students admitted with high school diplomas (or the equivalent) from outside of Québec will normally register in their first year in ten courses, five in each semester, plus all additional co-requisite laboratories. This first year of studies is called the *U0 year* and is a year of "general science" studies. B.Sc. students will have up to eight science courses required in the U0 year. These are called "collegial equivalent" science courses and are identified with the course numbering codes, "19x" (e.g. Bio 191). Students who have selected B.A. programs in the Division are only required to complete one or two science and mathematics courses in their discipline. Both B.Sc. and B.A. students must complete a "humanities requirement" (two courses), normally in the U0 year. After these requirements, B.Sc. students will have up to four "free elective" courses remaining in U0 while B.A. students will have up to seven. Students are encouraged to use some of these selections to consider a double major program or begin a minor program in another discipline.

Collegial Equivalent Science Courses

Four-year students will register in up to eight collegial equivalent science courses depending on their selected Major or Minor program, as per Table II below. Students applying with a Québec DEC will normally have completed all or most of the collegial courses required by the Bishop's program at CEGEP. (The Québec educational system ends high school at grade 11. Students then complete a two-year

college—CEGEP diploma, for a total education one year longer than grade 12. For this reason CEGEP students are normally admitted to three-year programs leading to the same Bachelor's degrees as four-year students). The first year after the general science year, that is the 2nd year in a 4-year program, is called the U1 year.

Humanities Requirement

Students entering any four-year program in the Division of Natural Sciences and Mathematics must complete six course credits of humanities studies, normally in the first year at Bishop's. Students who have a Québec Collegial Diploma (DEC), students admitted as "Mature Students", and 2nd Bachelor's degree students are all exempt from this requirement. The Humanities requirement must include *ELA 116 Effective Writing*, or another English course (coded 'ENG'), and one additional course selected from Humanities courses in the disciplines: Classical Studies, English, History, Liberal Arts, Philosophy or Religion (courses coded CLA, ENG, HIS, LIB, PHI, or REL). These credits are included in the 123 (or higher) total credit requirement. (See Table II)

Three-Year Programs

Admission with a Québec DEC

Students admitted to B.Sc. or B.A. degree programs with any Québec collegial diploma (DEC) will normally begin studies with the U1 year. The length of the program is three years, but depends on which (if any) collegial science and mathematics courses the student has completed in their DEC program. CEGEP graduates who are missing some (or all) of the "collegial equivalent" courses appropriate to their program choice as outlined in Table II above, will have these courses added to their total degree credit requirements. Such a program will necessarily be longer than three years. The collegial equivalent science courses (course code numbers, "19x") are normally completed in the first year, and are assumed to be prerequisite to the core U1 year courses in each discipline (e.g. Bio 115 Diversity of Life

Table II

Program	Life Science	Chemistry	Mathematics	Physics
Biochemistry	Bio 191, Bch 191	Che 191, Che 192	Mat 198, Mat 199	Phy 193, Phy 194
Biological Sciences, B.Sc.	Bio 191	Che 191, Che 192	Mat 198, Mat 199	Phy 193, Phy 194
Neuroscience*	Bio 191	Che 191, Che 192	Mat 198, Mat 199	Phy 193, Phy 194
Biology, B.A.	Bio 191			
Chemistry	Bch 191	Che 191, Che 192	Mat 198, Mat 199	Phy 191, Phy 192
Computer Science			Mat 191, Mat 192	Phy 191, Phy 192
All Mathematics programs, B.Sc.			Mat 191, Mat 192	Phy 191, Phy 192
All Mathematics programs, B.A.			Mat 191, Mat 192	
Physics		Che 191, Che 192	Mat 191, Mat 192	Phy 191, Phy 192
Science Teaching	Bio 191	Che 191, Che 192	Mat 191, Mat 192 OR Mat 198, Mat 199	Phy 191, Phy 192 OR Phy 193, Phy 194

**The Neuroscience B.Sc. program also requires a collegial equivalent Psychology course (PSY 101). Students who have completed "Introduction to Psychology" at CEGEP are exempted.*

I, requires Bio 191 Introductory Biology as a prerequisite). If the student's DEC included some or all of the collegial courses, General Biology, General Chemistry, Solutions Chemistry, Differential Calculus, Integral Calculus, Mechanics and/or Electricity and Magnetism, the equivalent Bishop's courses will not be required. Course lists and credit totals for the various programs described in the Departmental sections following all assume that the appropriate collegial equivalent courses have already been completed, either at CEGEP or during a U0 general science year at Bishop's.

Transfers from other Universities and Colleges

Students entering a program in the Division of Natural Sciences and Mathematics from another Canadian University or College, or from accredited international post-secondary institutions, will have their transcripts of grades examined individually for possible transfer credit against a Bishop's program's requirements. Please consult the Admission section of this Calendar or the Admissions Office, admission@ubishop.ca for details.

Transfers from other programs at Bishop's University

Bishop's students wishing to transfer into a program offered by the Division of Natural Sciences and Mathematics normally require a cumulative average of 65% on all courses attempted at Bishop's. Students whose average is below 65% may still register in courses offered in the Division, subject to the normal regulations regarding course registration in the University. Program transfers are not normally permitted in a student's first semester of studies at Bishop's University.

Advanced Placement

The Division of Natural Sciences and Mathematics grants credit for successful completion of AP examinations in the Sciences as follows:

- 1) A minimum score of 4 is required;
- 2) Exams:

Biology	credit for BIO 191/BIL 191
Chemistry	credit for CHE 191/081 and CHE 192/082
Computer Science AB	credit for CSC 111
Mathematics BC	credit for MAT 191 and MAT 19
Physics C-Mechanics	credit for PHY 191/081
Physics C-Electricity	credit for PHY 192/082

Graduation "with Distinction"

To graduate with the transcript notation "with Distinction", students must achieve an average of 80% or better on all courses at the 200 level or above which are required in the program. If unspecified options are required, then the best minimum number necessary will be used in the calculation of the average.

Biochemistry

The Biochemistry program at Bishop's is coordinated through an interdisciplinary committee of chemists, biochemists and biologists. It offers degree options in two separate streams, a concentration Chemistry which provides a strong background in Chemistry and a concentration Biology, which provides a strong background in both biology and chemistry applicable to students looking to continue in the health or life sciences. Both streams offer an Honours degree, which rigorously prepares students for graduate studies or for

professional schools, and a Majors degree, which provides students more flexibility in their program. The program places strong emphasis on mastering the fundamentals of experimental biochemistry, and provides students with well equipped laboratory facilities, first-hand experience with modern laboratory equipment, and close instructional contact with professors. As well, the Agriculture Canada Research Station in Lennoxville and the Université de Sherbrooke, with its associated medical research hospital, are easily accessible to students and provide additional opportunities and exposure for interested Honours students.

Entrance Requirements

To enter a three-year Biochemistry program, a student must have a Quebec collegial diploma (D.E.C.) in science, or the equivalent, including Mathematics NYA, NYB, Physics NYA, NYB, Chemistry NYA, NYB, and Biology NYA. Students entering a degree program with CEGEP Chemistry BFA and Chemistry BFB are exempted from Chemistry 105a and 185a but must include Chemistry 106b and 186b plus an additional one-semester chemistry or biochemistry lecture course in their program; students entering a degree program with CEGEP Chemistry BFA only, must include Bishop's Chemistry 105a, 185a, 106b, and 186b in their program.

Students entering four-year degree programs (after completion of Ontario OSSD, grade 12 in other provinces or the USA, or equivalent) must register in the required collegial equivalent science courses (Chemistry 191/081 and 192/082, Mathematics 198/088 and 199/089, Physics 193/083 and 194/084, and Biology/Biology Laboratory 191). Those students who intend to take mathematics and physics courses at the University level are advised to replace Mathematics 198/088 by Mathematics 191/081, and Mathematics 199/089 by Mathematics 192/082, Physics 193/083 by Physics 191/081, and Physics 194/084 by Physics 192/082. All students entering four-year degree programs must also register in their first year for English Language 116, or another English course, and an additional three-credit course which must be selected from Humanities courses in English, History, Classical Studies, Philosophy, Religion, or Liberal Arts. Students in four-year programs must complete a total of ten one-semester lecture courses plus all co-requisite laboratory courses to complete this U0 year.

Requirements for Honours Programs

Students are not admitted to an Honours Biochemistry program until the end of U2 year. To be eligible to enter the Honours Biochemistry programs, concentration Biology or Chemistry, a student must normally achieve:

- i) a minimum cumulative average of 75% by the end of the U2 year, and
- ii) at least 75% in each course required in the program.

To complete an Honours Biochemistry program, a student must;

- i) maintain a minimum cumulative average of 75% and
- ii) achieve at least 75% in each course required in the program with a maximum permitted exemption of four credits.

The programs also include a six-credit honours research project that will be evaluated by at least three faculty from the Biochemistry Program Committee. The scientific results of the honours research project must be presented in a public, oral seminar and submitted in a written thesis.

The Biochemistry Programs

Biochemistry Major - Concentration Biology

The Biochemistry Major program is a three-year program that requires 30 three-credit one-semester courses, or their equivalent, for a total of 90 course credits, plus 10 credits for associated laboratory courses, for a total of 100 credits overall. The 90 course credits are divided as follows: 15 course credits of required chemistry (plus 5 laboratory credits), 12 course credits of required biology (plus 3 laboratory credits), 12 course credits of required biochemistry (plus 2 laboratory credits), 3 course credits of required physics, 18 course credits of required options in chemistry, biology or biochemistry (plus any co-requisite laboratory courses), 30 credits of options. The program is under the supervision of the Biochemistry Committee; enquiries and questions concerning the program should be directed to the Director of the Biochemistry Program. The normal sequence of courses in the program is shown below. Students must, however, consult with the director before registration.

1st Year

(5 courses-15 credits /3 laboratories)

BIO 110a Introductory Cellular & Molecular Biology

CHE 103b Physical Chemistry I

CHE 183b Physical Chemistry Laboratory I

CHE 104a Analytical Chemistry

CHE 184a Analytical Chemistry Laboratory

CHE 105a Organic Chemistry I: Introductory

CHE 185a Organic Chemistry Laboratory I

PHY 101a Statistical Methods

(5 courses-15 credits /3 laboratories)

BIO 118b Genetics

BIL 118b Genetics Laboratory

CHE 102a Inorganic Chemistry I

BCH 211b Biochemistry I

CHE 106b Organic Chemistry II: Introductory

CHE 186b Organic Chemistry Laboratory II

CHE 189b Instrumental Analysis Laboratory I

One Option

2nd Year

(5 courses-15 credits /3 laboratories)

BCH 212a Biochemistry II

BCH 281a Analytical Biochemistry Laboratory I

BIO 226a Animal Physiology I

BIL 226a Animal Physiology Laboratory I

BIO 352a Microbiology

BIL 352a Microbiology Laboratory

Two Options

(5 courses-15 credits/1 laboratory)

BCH 275b Biochemistry III

BCH 282b Analytical Biochemistry Lab II

Four Options

3rd Year

(5 courses-15 credits)

BCH 370a Molecular Genetics

Four Options

(5 courses-15 credits)

Five Options

Required Optional Courses (6 from the list):

Biology:

BIO 228 Animal Physiology II (L)

BIO 252 Bioethics

BIO 291 Biometry (L)

BIO 310 Advanced Cell Biology

BIO 320 Programmed Cell Death

BIO 328 Adv. Animal Physiology

BIO 345 Plant Physiology

BIO 365 Developmental Biology

Biochemistry:

BCH 336 Immunology

BCH 338 Environm. Toxicology

BCH 341 Current Topics in Biotechnology

CHE 226 Interm. Org. Chem. II (L)

BCH 374 Biotechnology (L)

BCH 380 Psychopharmacology

BCH 461 Enzymology

Chemistry:

CHE 144 Environmental Chem I

CHE 223 Chem. Spectroscopy (L)

CHE 225 Interm. Org. Chem. I (L)

CHE 227 Chem. Spectroscopy (L)

CHE 244 Environmental Chem II (L)

Free Electives (10)

Recommended Free Elective Course:

BIO 212 Evolution

BIO 379 Clinical Neuropsychology

PHI 245 The Philosophy of Science

Biochemistry Honours - Concentration Biology

The Biochemistry Honours program is a three-year program that prepares a student for graduate studies in biochemistry and related disciplines, for Medicine and Dentistry, as well as for direct professional employment. The program requires 30 three-credit one-semester courses, or their equivalent, for a total of 90 course credits, plus 11 credits for associated laboratory courses, for a total of 99 credits overall. The 90 course credits are divided as follows:- 15 course credits of required chemistry (plus 5 laboratory credits), 18 course credits of required biology (plus 4 laboratory credits), 21 course credits of required biochemistry (plus 2 laboratory credits), 3 course credits of required physics, 15 course credits of required options in chemistry, biology or biochemistry (plus any co-requisite laboratory courses), 18 credits of options. The program is under the supervision of the Biochemistry Committee; enquiries and questions concerning the program should be directed to the Director of the Biochemistry Program. The normal sequence of courses in the program is shown below. Students must however, consult with the director before registration.

1st Year

(5 courses-15 credits /3 laboratories)

BIO 110a Introductory Cellular & Molecular Biology
CHE 103b Physical Chemistry I
CHE 183b Physical Chemistry Laboratory I
CHE 104a Analytical Chemistry
CHE 184a Analytical Chemistry Laboratory
CHE 105a Organic Chemistry I: Introductory
CHE 185a Organic Chemistry Laboratory I
PHY 101a Statistical Methods

(5 courses-15 credits /3 laboratories)

BIO 118b Genetics
BIL 118b Genetics Laboratory
BCH 211b Biochemistry I
CHE 102a Inorganic Chemistry I
CHE 106b Organic Chemistry II: Introductory
CHE 186b Organic Chemistry II: Laboratory II
CHE 189b Instrumental Analysis Laboratory I
One Option

2nd Year

(5 courses-15 credits /3 laboratories)

BCH 212a Biochemistry II
BCH 281a Analytical Biochemistry Laboratory I
BIO 226a Animal Physiology I
BIL 226a Animal Physiology Laboratory I
BIO 352a Microbiology
BIL 352a Microbiology Laboratory
Two Options

(5 courses-15 credits /1 laboratory)

BCH 275b Biochemistry III
BCH 282b Analytical Biochemistry Lab II
Four Options

3rd Year

(5 courses-15 credits/1 laboratory)

BIO 272a Scientific Writing
BIO 291a Biometry
BIL 291a Biometry Lab
BCH 370a Molecular Genetics
BCH 461a Enzymology
BCH 482a/b Research Project I

(5 courses-15 credits)

BCH 483a/b Research Project II
Four Options

Required Optional Courses (5 from the list):

Biology:

BIO 228 Animal Physiology II (L)
BIO 252 Bioethics
BIO 310 Advanced Cell Biology
BIO 320 Programmed Cell Death
BIO 328 Adv. Animal Physiology
BIO 345 Plant Physiology
BIO 359 Human Genetics
BIO 365 Developmental Biology

Biochemistry:

BCH 336 Immunology
BCH 338 Environm. Toxicology
BCH 341 Current Topics in Biotechnology
BCH 374 Biotechnology (L)
BCH 380 Psychopharmacology

Chemistry:

CHE 144 Environmental Chem. I
CHE 223 Physical Chem. II (L)
CHE 225 Interm. Org. Chem. I (L)
CHE 226 Interm. Org. Chem. II (L)
CHE 227 Chem. Spectroscopy (L)
CHE 244 Environmental Chem. II (L)

Free Electives (6)

Biochemistry Major - Concentration Chemistry

The Biochemistry Major program is a three-year program that requires 30 three-credit one-semester courses, or their equivalent, for a total of 90 course credits, plus 13 credits for associated laboratory courses, for a total of 103 credits overall. The 90 course credits are divided as follows:- 30 course credits of required chemistry (plus 9 laboratory credits), 9 course credits of required biology (plus 2 laboratory credits), 15 course credits of required biochemistry (plus 2 laboratory credits), 15 course credits of required options in chemistry, biology or biochemistry (plus any co-requisite laboratory courses), 24 credits of options. The program is under the supervision of the Biochemistry Committee; enquiries and questions concerning the program should be directed to the Director of the Biochemistry Program. The normal sequence of courses in the program is shown below. Students must however, consult with the director before registration.

1st Year

(5 courses-15 credits /3 laboratories)

BIO 110a Introductory Cellular & Molecular Biology

CHE 103b Physical Chemistry I

CHE 183b Physical Chemistry Laboratory I

CHE 104a Analytical Chemistry

CHE 184a Analytical Chemistry Laboratory

CHE 105a Organic Chemistry I: Introductory

CHE 185a Organic Chemistry Laboratory I

One Option

(5 courses-15 credits /4 laboratories)

BIO 118b Genetics

BIL 118b Genetics Laboratory

BCH 211b Biochemistry I

CHE 102a Inorganic Chemistry I

CHE 106b Organic Chemistry II: Introductory

CHE 186b Organic Chemistry Laboratory II

CHE 189b Instrumental Analysis Laboratory I

CHE 223a Physical Chemistry II

CHE 283a Physical Chemistry Laboratory II

Note: CHE 223 can be taken in the 2nd year

2nd Year

(5 courses-15 credits /3 laboratories)

BCH 212a Biochemistry II

BCH 281a Analytical Biochemistry Laboratory I

CHE 227a Chemical Spectroscopy

CHE 287a Chemical Spectroscopy Laboratory

CHE 225a Intermediate Organic Chemistry I

CHE 385a Intermediate Organic Chem. Laboratory I

Two Options

(5 courses-15 credits /2 laboratories)

BCH 275b Biochemistry III

BCH 282b Analytical Biochemistry Lab II

CHE 224b Physical Chemistry III

CHE 226b Intermediate Organic Chemistry II

CHE 386b Intermediate Organic Chem. Laboratory II

Two options

Note: CHE 224 can be taken in the 3rd year

3rd Year

(5 courses-15 credits /1 laboratory)

BIO 226 Animal Physiology I

BIL 226 Animal Physiology Laboratory I

BCH 370a Molecular Genetics

Three options

(5 courses-15 credits)

Five Options

Required Optional Courses (5 from the list):

Biology:

BIO 228 Animal Physiology II (L)

BIO 310 Advanced Cell Biology

BIO 320 Programmed Cell Death

BIO 345 Plant Physiology

BIO 352 Microbiology (L)

BIO 359 Human Genetics

BIO 365 Developmental Biology

Biochemistry:

BCH 336 Immunology

BCH 338 Environm. Toxicology

BCH 380 Psychopharmacology

BCH 341 Current Topics in Biotechnology

BCH 374 Biotechnology (L)

BCH 461 Enzymology

Chemistry:

CHE 144 Environmental Chem I

CHE 221 Inorganic Chem. II (L)

CHE 244 Environmental Chem. II (L)

CHE 464 Computational Chem.

Free Electives (8)

Recommended Free Elective Course:

BIO 212 Evolution

BIO 379 Clinical Neuropsychology

PHI 245 The Philosophy of Science

Biochemistry Honours - Concentration Chemistry

The Biochemistry Honours program is a three-year program that prepares a student for graduate studies in biochemistry and related disciplines, for Medicine and Dentistry, as well as for direct professional employment. The program requires 30 three-credit one-semester courses, or their equivalent, for a total of 90 course credits, plus 15 credits of associated laboratory courses, for a total of 105 credits. The 90 course credits are divided as follows:- 33 course credits of required chemistry (plus 10 laboratory credits), 15 course credits of required biology (plus 3 laboratory credits), 24 course credits of required biochemistry (plus 2 laboratory credits), 18 credits of options. The program is under the supervision of the Biochemistry Committee; enquiries and questions concerning the program should be directed to the Director of the Biochemistry Program. The normal sequence of courses in the program is shown below. Students must however, consult with the director before registration.

1st Year

(5 courses-15 credits /3 laboratories)

BIO 110a Introductory Cellular & Molecular Biology

CHE 103b Physical Chemistry I

CHE 183b Physical Chemistry Laboratory I

CHE 104a Analytical Chemistry

CHE 184a Analytical Chemistry Laboratory

CHE 105a Organic Chemistry I: Introductory

CHE 185a Organic Chemistry Laboratory I

One Option

(5 courses-15 credits /4 laboratories)

BIO 118b Genetics

BIL 118b Genetics Laboratory

BCH 211b Biochemistry I

CHE102b Inorganic Chemistry I

CHE 106b Organic Chemistry II: Introductory

CHE 186b Organic Chemistry Laboratory II

CHE 189b Instrumental Analysis Laboratory I

CHE 223a Physical Chemistry II

CHE 283a Physical Chemistry Laboratory II

Note: CHE 223 can be taken in the 2nd year

2nd Year

(5 courses-15 credits /5 laboratories)

BIO 226 Animal Physiology I

BIL 226 Animal Physiology Laboratory I

BCH 212a Biochemistry II

BCH 281a Analytical Biochemistry Laboratory I

CHE 221a Inorganic Chemistry II

CHE 281a Inorganic Laboratory II

CHE 227a Chemical Spectroscopy

CHE 287a Chemical Spectroscopy Laboratory

CHE 225a Intermediate Organic Chemistry I

CHE 385a Intermediate Organic Chem. Laboratory I

Note: CHE 221 can be taken in the 3rd year

(5 courses-15 credits /2 laboratories)

BCH 275b Biochemistry III

BCH282b Analytical Biochemistry Lab II

BCH 336 Immunology

BCH 224b Physical Chemistry III

CHE 226b Intermediate Organic Chemistry II

CHE 386b Intermediate Organic Chemistry II

One Option

Note: CHE 224 and BCH 336 can be taken in the 3rd year

3rd Year

(5 courses-15 credits /1 laboratory)

BIO 272a Scientific Writing

BIO 291a Biometry/BIL291a Biometry Lab

BCH 370a Molecular Genetics

BCH 461a Enzymology

BCH 482a/b Research Project I

(5 courses-15 credits)

BCH 483a/b Research Project II

Four Options

Free Electives (6)

Biochemistry Minor

This program is intended for students who are not registered in the Department of Chemistry. The program requires 8 three-credit one-semester courses, or their equivalent, for a total of 24 course credits, plus credits for associated laboratory courses.

Required Courses: (5 courses - 15 credits, plus 4 laboratory credits)

BIO 110a	Introductory Cellular & Molecular Biology
BCH 211b	Biochemistry I: Proteins
BCH 281b	Analytical Biochemistry Laboratory I
BCH 275b	Biochemistry III: Metabolism
BCH 282a	Introductory Biochemistry Laboratory II
CHE 104a	Analytical Chemistry
CHE 184a	Analytical Chemistry Laboratory
CHE 105a	Organic Chemistry I: Introductory
CHE 185a	Organic Chemistry Laboratory I

Required Optional Courses (3 from the list):

Chemistry:

CHE 103	Physical Chemistry I (L)
CHE 106	Organic Chemistry II: Introductory (L)

Biochemistry:

BCH 212	Biochemistry II: Lipids and Biomembranes
BCH 336	Immunology
BCH 370	Molecular Genetics
BCH 380	Psychopharmacology
BCH 461	Enzymology

Biology:

BIO 218	Genetics (L)
BIO 226	Animal Physiology I (L)
BIO 228	Animal Physiology II (L)
BIO 252	Bioethics
BIO 320	Programmed Cell Death
BIO 345	Plant Physiology
BIO 352	Microbiology (L)

Course Prerequisites

The normal prerequisites for each course are listed. Students not having the appropriate prerequisite may be admitted to a course with permission of the instructor.

Cross-Listed Courses

Students can receive credits only once for any courses that are cross-listed between Biochemistry, Biology and/or Neuroscience. BCH 275b is a cross-listed course with BIO 215b. BCH 380b is a cross-listed course with PBI 380b and BIO 380b. BCH282b is a cross-listed course with BIL 215b. BCH 370a is a cross-listed course with BIO 360a. BCH 374b/BCH 384b is a cross-listed course with BIO314b/BIL314b.

Biochemistry 101b Introduction to Nutrition 3-3-0

This course is designed for students from any discipline (except Biochemistry, Biology and Chemistry). It will provide an introduction to basic concepts of nutrition and ways that good nutrition can be integrated into a healthy life style. Principles of digestion and absorption, the function of nutrients, disease prevention, diet modification and weight control will be discussed.

Prerequisites: None. However, secondary school Biology is strongly recommended.

Note: This course may not be taken for credit by students in Biology, Biochemistry or Chemistry programs.

Biochemistry 192b Biochemistry of Macromolecules 3-1-3

Introduction to biochemistry with the emphasis on the structure and function of proteins, lipids, carbohydrates and nucleic acids.

Prerequisites: Chemistry 191 and Biology 191.

Biochemistry 211a Biochemistry I - Proteins 3-3-0

Protein structure and function, including protein purification, structure analysis, protein synthesis, distribution and degradation, as well as molecular visualization of protein structure.

Prerequisite: Chemistry 105a/185a, Biology 110a

Co-requisite: Chemistry 106b/186b, Chemistry 189

Professor Prusak

Biochemistry 212b Biochemistry II - Lipids and Biomembranes 3-3-0

Biomembranes structure and function, including study of cell membrane structure, trans-membrane signaling, hormones and secondary messengers.

Prerequisite: Biochemistry 211b

Co-requisite: Biochemistry 281a

Professor Prusak

Biochemistry 275b Biochemistry III - Metabolism 3-3-0

Introduction to the basic metabolic pathways of living cells. These include the central metabolic pathways associated with cellular energy generation, carbohydrate degradation and synthesis, fatty acid degradation and synthesis, lipid metabolism and nitrogen metabolism. Emphasis will be placed on the role and regulation of enzymes associated with these pathways.

See Biology 215b

Students may not take this course for credit if they have received credit for BIO 215b

Prerequisite: Biochemistry 211a and Biochemistry 212a/281a

Co-requisite: Biochemistry 282b

Professor Stroehrer

Biochemistry 281a Analytical Biochemistry Laboratory I 1-0-3

This course, together with BCH 282a, will introduce the basic concepts of isolation and identification of biomolecules, the use of chromatography, electrophoresis, and the enzymatic techniques for the quantization of metabolites.

Co-requisite: Biochemistry 212a

See CHE 189b

Students may not take this course for credit if they have received credit for CHE 189b.

Professor Wood

Biochemistry 282b Analytical Biochemistry Laboratory II 1-0-3

This course, together with BCH 281b, will introduce the basic concepts of protein isolation and identification; the use of high pressure, thin layer and gas/liquid chromatography, and enzymatic techniques for the quantitation of metabolites.

Co-requisite: Biochemistry 275b

Professor Prusak

Biochemistry 336b Immunology 3-3-0

A comprehensive study of the fundamental principles of immunobiology. Inter cellular recognition and self/non-self discrimination. Clonal selection theory and genetic basis of antibody diversity. Biochemistry of immunoglobulins. Regulation of immune response and tolerance.

Prerequisites: Biology 110a and Biology 118b/Biology Lab 118b

Professor Prusak

Biochemistry 338b Environmental Biochemistry and Toxicology 3-3-0

This course will examine the biochemical effects of environmental stresses on organisms, and adaptations that allow organisms to face these stresses. Emphasis is placed on biochemical responses to toxic compounds such as aromatics, halogenated aliphatics, drugs, and heavy metals. Other topics will include adaptations to stresses such as temperature extremes, pathogens, and ionizing radiation. Applications to related biotechnological processes may also be considered.

Prerequisite: Biology 110a and Biology 118b/ Biology Lab 118b

Professor Prusak

Biochemistry 341b Current Topics in Biotechnology 3-3-0

Seminar style course in which students will explore the current topics in biotechnology.

Prerequisites: Biochemistry 370

Biochemistry 342b Bioinformatics 3-1-3

This course will introduce students to Bioinformatics, which uses computer databases to store, retrieve and assist in understanding biological information.

Prerequisites: Biochemistry 370

Biochemistry 370a Molecular Genetics 3-3-0

The molecular biology of nucleic acids and proteins, including DNA replication, mutation, and recombination; RNA transcription; and protein synthesis. Also covered will be protein/nucleic acid interactions and regulation of gene expression.

See Biology 360a

Students may not take this course for credit if they have received credits for BIO 360a

Prerequisite: Biology 118b, Biochemistry 211b and Biochemistry 212a

Professor Stroehrer

Biochemistry 371a Independent Studies in Biochemistry I 3-1-3

This course is not regularly offered and is only meant for final-year students who wish to pursue in-depth study of a particular area of biochemistry or who have a special need for a biochemistry course that would otherwise not be available during their final semester of course work. This course can only be done in close collaboration with a faculty advisor from within the Biochemistry program, and may not be used as a supplement to a student's honours project. Requirements for this course will be agreed upon by at least three professors from within the Biochemistry Program.

Prerequisite: Consent of members of the Biochemistry Program.

Biochemistry 372b Independent Studies in Biochemistry II 3-1-3

This course represents an additional semester of independent work, either a continuation of or a separate course from Bch 371a, meant for final-year students who wish to pursue in-depth study of a particular area of biochemistry or who have a special need for a biochemistry course that would otherwise not be available during their final semester of course work. This course can only be done in close collaboration with a faculty advisor from within the Biochemistry Program, and may not be used as a supplement to a student's honours project. Requirements for this course will be agreed upon by at least three professors from within the Biochemistry Program.

Prerequisite: Consent of members of the Biochemistry Program.

Biochemistry 374b Biotechnology 3-3-0

This course will explore the technical approaches used in current research and biotechnology, emphasizing the applications of molecular strategies and processes studied in Biology 360/Biochemistry 370. Both the theoretical and practical aspects of these molecular approaches will be discussed, as well as how these techniques are utilized and how they have changed modern research and medicine.

Prerequisite: Biology 360a or Biochemistry 370a

Corequisite: Biochemistry 384b

Professor Stroehrer

Biochemistry 380b Psychopharmacology 3-3-0

This course is designed to introduce students in psychology and the natural sciences to the field of psychopharmacology. Emphasis will be placed on the relationships between psychoactive drugs, their mechanisms of action in the nervous system, and human behavior. Following an analysis of the principles of pharmacology and pharmacokinetics, as well as the mechanisms of drug tolerance and dependence, the cognitive, emotional and behavioral aspects of specific classes of drugs will be examined. These classes of drugs will include sedatives, hypnotics, stimulants, narcotics, psychotomimetics, psychedelics, and hallucinogens.

Students who have taken PBI 280 or BIO 280 (Psychopharmacology) may not take this course for credit

Prerequisite: PBI288b or permission of the instructor

Professor Drumheller

Biochemistry 384b Biotechnology Laboratory 1-0-3

Practical application of several of the techniques introduced in Biochemistry 374b.

Prerequisite: Biology 360a or Biochemistry 370a

Corequisite: Biochemistry 374b

Professor Stroehrer

Biochemistry 461a Enzymology 3-3-0

Kinetics of enzyme reactions and mechanism of catalysis. Regulation by allosteric effectors and covalent modification. Protein targeting and degradation.

Prerequisites: Biochemistry 211b, 212a and 275b

Professor Prusak

Biochemistry 482a/b Honours Research Project I 3-1-6
An introduction to the planning, execution and reporting of biochemical research. Students are required to choose a research project and in consultation with an approved supervisor, draw up a formal research proposal of work to be undertaken. The proposal must be submitted in final form by November 1or (February 1 for winter semester). The final mark in this course will be based on the research proposal, a written report of the results of the initial experiments as outlined in the proposal and a poster presentation. Satisfactory completion of Biochemistry 482 with a minimum mark of 70% will permit enrolment in Biochemistry 483a/b.

Prerequisite: Permission of course coordinator

Co-requisite: Biology 272a

Professor Prusak

Biochemistry 483a/b Honours Research Project II 3-1-12
A continuation of Biochemistry 482, consisting of experimentation as outlined in the research proposal; presentation of a seminar based on research findings, to be scheduled in the last two weeks of term; and submission of a written dissertation on or before the last day of classes.

Prerequisite: Biochemistry 482a/b and permission of course coordinator.

Professor Prusak

Biological Sciences

The biology programs at Bishop's University provide a broad foundation in the field of biology, preparing its students for numerous options. These include graduate and professional studies in medicine, dentistry, veterinary medicine, the allied health sciences, forestry, wildlife biology, microbiology, biotechnology, and many other applied areas. A degree in biology also prepares the student for direct employment in the biotechnology sector, environmental biology, or the allied health fields.

The Department of Biological Sciences is well equipped for study and student research in general biology, physiology, molecular biology and ecology. In house facilities include aquatic and terrestrial animal rooms, a greenhouse, walk-in-growth chambers, laminar flow hoods, incubators, centrifuges, research microscopes, autoclaves, and computers for data analysis, graphing and simulation studies. Students are given first-hand experience in the use of these facilities and are encouraged in every way possible to develop their capacities for independent work in biology.

Biology's best attribute is its teachers. The faculty at Bishop's is dedicated to undergraduate student teaching. Students who come to BU are treated as individuals, not numbers, and will be exposed to numerous hands-on lab situations. At Bishop's you won't just be shown how to do something, you will be expected to become proficient yourself, gaining practical experience often lacking in other biology programs.

Bishop's University is located near a variety of habitats including bogs, lakes, rivers, mountains, marshes, hardwood forests and meadows, most of which are in easy reach from the campus and are accessible for field trips. This means you could be hiking one lab and canoeing the next. The rural setting of Bishop's combines the features of a biological field station with those of a well-equipped biology department, providing exceptional opportunities for field study and research in ecology and environmental biology. Those students interested in molecular biology and physiology will benefit from the proximity of the Université de Sherbrooke, and its academic hospitals and School of Pharmacology. This French-language university provides an active nucleus of researchers in physiology, immunology, nuclear medicine, and microbiology. An ongoing collaboration between the Université de Sherbrooke and Bishop's provides our students with access to these researchers and their laboratories.

The Biology B.Sc. programs are designed on a foundation of prerequisite courses at the collegial level in biology, chemistry, mathematics, and physics. These are followed by a set of core courses that lead to one of four concentrations: Health Science, Molecular Biology, Environmental Biology, Diversity Form and Function. The Biology B.A. program is designed for students lacking a background in the sciences and allows them to study those in either Health Science or Environmental Biology.

B.Sc. Programs, Major/Honours:

The B.Sc. programs are designed for those students wishing to graduate with a Bachelor of Science degree which requires a strong grounding in the core sciences (math, physics, and chemistry). Students graduating from these programs will be well prepared to continue on to graduate (M.Sc. or Ph.D.) or professional school (i.e. medicine or physiotherapy) programs.

Concentration "Health Science"

This program is designed specifically for students interested in graduating from BU and then proceeding on to a second degree in the applied health fields (i.e. medicine, dentistry, physiotherapy, or athletic therapy).

Concentration "Molecular Biology"

Students interested in seeking immediate employment or future graduate training in the field of biotechnology or molecular biology should strongly consider this program.

Concentration "Environmental Biology"

This program is designed for those students interested in general ecology, human-animal interactions, biodiversity, and conservation biology.

Concentration "Diversity, Form and Function"

This program is ideal for students interested in biodiversity, veterinary science, taxonomy, zoology, botany, animal science, and conservation biology.

Entrance Requirements

Students are considered for entry into programs offered by the Division of Natural Sciences and Mathematics after completion of a Québec Collegial Diploma (DEC), grade 12 in other provinces or the U.S.A., or the equivalent level of education from other international origins. Students applying from a Québec CEGEP will normally be admitted to a three-year program of at least 93 credits. All other students seeking a first Bachelor's degree will normally be admitted to a four-year program of at least 123-credits. A student's total credit requirement depends on the program and the type of degree chosen. However, all Bishop's students must complete the 3-credit, English Writing Proficiency examination (EWP) included in the total credit requirement.

Entrance Requirements for Quebec Students

To enter any of the B.Sc. Programs, a student must normally have a Quebec collegial diploma (D.E.C.) in science, or the equivalent, including General Biology, General Chemistry, Solutions Chemistry, Differential Calculus, Integral Calculus, Mechanics and/or Electricity and Magnetism. Students having these prerequisites can normally complete their undergraduate program at Bishop's in three years.

CEGEP Chemistry 202-BFA-05 and 202-BFB-05 (organic chemistry) are also recommended as preparation for Bishop's biology programs, but students may enter without these courses, or with Chemistry 202 only, according to the following requirements:

- (i) Students with CEGEP Chemistry 202-BFA-05 and Chemistry 202-BFB-05 are exempt from Biology155a/Chemistry 105a but must replace this course with one science option.
- (ii) Students who obtained a grade of 85% or higher in CEGEP Chemistry 202-BFA-05, are exempt from Biology155a/Chemistry 105a but must replace this course with one science option.
- (iii) Students who obtained less than 85% in CEGEP Chemistry 202-BFA-05 and students lacking CEGEP Chemistry 202-BFA-05 must include Biology155a or Chemistry 105a in their program.

Entrance Requirements for Non-Quebec Students

Upon completion of grade 12 in other provinces or the United States, or of the equivalent level of secondary education elsewhere, students enter a four-year degree program at Bishop's. In the biology B.Sc. programs, students must register in their first year for the following required Quebec-collegial-equivalent science courses: Biology/Biology Laboratory 191a; Chemistry 191a/081a, 192b/082b; Mathematics 198a/088a, 199b/089a; Physics 193a/083a, 194b/084b. In the biology B.A. program, students must register in their first year for Biology/Biology Laboratory 191a. In all biology programs, students must also register in their first year for English Language 116, or another English course, and for one course (three lecture credits) in English, Classical Studies, History, Philosophy, Religion, or Liberal Arts. In the Biology B.Sc. programs, students must register for a final course (three lecture credits) in any discipline.

Regardless of what level the student is entering, all students wishing to graduate from the Biology B.Sc. program must complete the Biology core requirements and the appropriate concentration core courses. Also, the students must select the appropriate number of concentration options, 2-3 science options, and appropriate number of free electives. Details for these course selections for each of these criteria may be found below. In addition, all students entering the U0 year must complete the appropriate courses listed under the "U0 Courses for Non-Quebec B.Sc. Biology Students".

The lists of classes below do not include co-requisite labs. For a student to complete the requirements of their program they must complete both the course and its associated co-requisite lab.

U0 Courses for Non-Quebec B.Sc. Biology Students:

Total Credits 30

Checklist of required courses for non-Quebec students registered in a B.Sc. program.

BIO191 Introductory Biology
 CHE191 General Chemistry I
 CHE192 General Chemistry II
 PHY193 General Physics I for Life Sciences I
 PHY194 General Physics II for Life Sciences II
 MAT198 Calculus I for Life Sciences
 MAT199 Calculus II for Life Sciences
 ELA116 Effective Writing (or other ENG)

HUM (CLA, ENG, HIS, REL, PHI or Lib. Arts)
 Free Option (One 3 Credit Course from any Division)

Biology Core: required by all Biology B.Sc. students:

Total Credits 21

BIO110 Introductory Cellular and Molecular Biology
 BIO115 Diversity of Life 1
 BIO116 Diversity of Life 2
 BIO118 Genetics
 BIO226 Animal Physiology 1
 PHY101 Statistical Methods
 CHE105 Organic Chemistry

Students must also choose the specified selection of courses for their desired concentration. See below for details.

B.Sc. "Health Science" Concentration

Concentration Courses: required courses for the Health Science concentration: Total Credits 18 credits

BIO133 Human Anatomy
 BIO215 Metabolism
 BIO228 Animal Physiology 2
 BIO352 Microbiology
 PSY101 Introduction to Psychology I
 PBI288 Brain and Behavior 1

Concentration Options: all Health science students must take 7 courses from the following list of options. A minimum of 4 of the 7 courses must be from BIO/BCH/CHE: Total Credits 21

BIO252 Bioethics
 BIO291 Planning and Analysis of Biological Experiments
 BIO310 Advanced Cell
 BIO349 Medical and Veterinary Entomology
 BIO328 Advanced Physiology
 BIO359 Human Genetics
 BIO360 Molecular Genetics
 BIO117 General Ecology
 BIO212 Evolution
 BIO220 History of biology
 BIO365 Developmental Biology
 BIO379 Clinical Neuropsychology
 BIO380 Psychopharmacology
 BCH191 Nutrition
 BCH336 Immunology
 BCH338 Environmental Biochemistry and Toxicology
 CHE106 Organic Chemistry II:
 PBI275 Health Psychology I
 PBI276 Health Psychology II
 PBI327 Psychology of Nutrition
 PSY203 Sports Psychology: Performance Enhancement
 PSY213 Research Methods
 PMA260 Psychological Statistics
 PSY328 Occupational Health Psychology

Science Courses: all health science majors must complete 2 science options: Total Credits 6

Science option 1 (One 3-Credit Course from the Division of Science)
 Science option 2 (One 3-Credit Course from the Division of Science)

Free Electives: all Biology Majors must complete 8 free electives from any division of their choice: Total Credits 24

Honours

Honours students complete the same as above but instead of 8 free electives should choose only 5. They must however complete the following three courses and maintain a) a minimum of 75% in all 200- and 300-level Biology courses with an overall (i.e. U2 and U3 combined) maximum permitted exemption of four credits representing no more than two courses, and b) a minimum of 75% in BIO462a/b and BIO463a/b.

BIO272 Scientific Writing for Life Science

BIO462 Honours thesis 1

BIO463 Honours thesis 2

B.Sc. "Molecular Biology" Concentration

Concentration Courses: required courses for the Molecular Biology concentration: Total Credits 21

CHE106 Organic Chemistry II

BIO215 Metabolism

BIO310 Advanced Cell

BIO360 Molecular Genetics

BIO365 Developmental Biology

BCH211 Biochemistry I: Proteins

BCH336 Immunology

Concentration Options: all Molecular Biology students must take 7 courses from the following list of options: Total Credits 21

BIO117 General Ecology

BIO220 History of Biology

BIO228 Animal Physiology 2

BIO252 Bioethics

BIO291 Planning and Analysis of Biological Experiments

BIO314 Biotech

BIO345 Plant Physiology

BIO352 Microbiology

BIO359 Human Genetics

BIO379 Clinical Neuropsychology

BIO380 Psychopharmacology

BCH191 Nutrition

BCH212 Biochemistry II: Lipids and Biomembranes

BCH338 Environmental Biochemistry and Toxicology

Science Courses: all Molecular Biology majors must complete 1 science options: Total Credits 3

Science option (One 3 Credit Course from the Division of Science)

Free Electives: all Biology Majors must complete 8 free electives from any division of their choice: Total credits 24

Honours

Honours students complete the same as above but instead of 8 free electives should choose only 5. They must however complete the following three courses and maintain a) a minimum of 75% in all 200- and 300-level Biology courses with an overall (i.e. U2 and U3 combined) maximum permitted exemption of four credits representing no more than two courses, and b) a minimum of 75% in BIO462a/b and BIO463a/b.

BIO272 Scientific Writing for Life Science

BIO462 Honours thesis 1

BIO463 Honours thesis 2

B.Sc. "Environmental Biology" Concentration

Concentration Courses: required courses for the Environmental Science concentration: Total Credits 18

BIO117 General Ecology

BIO212 Evolution

BIO217 Advanced Ecology

BIO221 Biogeography

CHE133 Environmental Chemistry

ESG127 Introduction to Physical Geography

Concentration Options: all Environmental Science students must take 7 courses from the following list of options. A minimum of 4 of which must be from BIO/BCH: Total Credits 21

BIO215 Metabolism

BIO230 Freshwater Biology

BIO257 Vascular Plant Systematics

BIO291 Planning and Analysis of Biological Experiments

BIO349 Medical and Veterinary Entomology

BIO352 Microbiology

BIO358 Animal Behavior

BIO345 Plant Physiology

BCH338 Environmental Biochemistry and Toxicology

ESG269 The Earths Crust

ESG226 Oceans I

ESG227 Oceans II

ESG250 Geomorphology

ESG251 Soils and Vegetation

ESG265 The Atmosphere and Weather

ESG361 Glacial Environments

Free Electives: all Biology Majors must complete 8 free electives from any division of their choice: Total Credits 24

Science Courses: all Environmental Biology majors students must complete 2 science options: Total Credits 6

Science option 1 (One 3 Credit Course from the Division of Science)

Science option 2 (One 3 Credit Course from the Division of Science)

Honours

Honours students complete the same as above but instead of 8 free electives should choose only 4. They must however complete the following four courses and maintain a) a minimum of 75% in all 200- and 300-level Biology courses with an overall (i.e. U2 and U3 combined) maximum permitted exemption of four credits representing no more than two courses, and b) a minimum of 75% in BIO462a/b and BIO463a/b.

BIO272 Scientific Writing for Life Science

BIO291 Planning and Analysis of Biological Experiments

BIO462 Honours thesis 1

BIO463 Honours thesis 2

B.Sc. "Diversity, Form and Function" Concentration

Concentration Courses: required courses for the Diversity, Form & Function concentration: Total Credits 18

BIO117 General Ecology

BIO212 Evolution

BIO228 Animal Physiology 2

BIO248 Invertebrate Zoology

BIO257 Vascular Plants Systematics
BIO270 Vertebrate Zoology

Optional Courses: the student would also have to take 7 courses from the following list of options. Total Credits 21

BIO133 Vertebrate Anatomy
BIO215 Metabolism
BIO291 Planning and Analysis of Biological Experiments
BIO310 Advanced Cell
BIO328 Advanced Physiology
BIO330 Ornithology
BIO345 Plant Physiology
BIO349 Medical and Veterinary Entomology
BIO350 Invertebrate Physiology
BIO352 Microbiology
BIO353 Parasitology
BIO354 Insect Biodiversity
BIO358 Animal Behavior
BIO367 Ichthyology
PBI288 Brain and Behavior 1

Free Electives: all Biology Majors must complete 8 free electives from any division of their choice: Total credits 24

Science Courses: all Diversity, Form and Function students must complete 2 science options: Total Credits 6

Science option 1 (One 3 Credit Course from the Division of Science)

Science option 2 (One 3 Credit Course from the Division of Science)

Honours

Honours students complete the same as above but instead of 8 free electives should choose only 4. They must however complete the following four courses and maintain a) a minimum of 75% in all 200- and 300-level Biology courses with an overall (i.e. U2 and U3 combined) maximum permitted exemption of four credits representing no more than two courses, and b) a minimum of 75% in BIO462a/b and BIO463a/b.

BIO272 Scientific Writing for Life Science
BIO291 Planning and Analysis of Biological Experiments
BIO462 Honours thesis 1
BIO463 Honours thesis 2

BA Programs:

Students entering Bishop's University from outside Quebec must enroll in the 4-year (120 credits) program, which includes the following U0 academic year. Students entering from the Quebec Cegep system do not take the U0 year and instead should start their 90 credits program with the Biology Core courses.

The lists of classes below do not include co-requisite labs. For a student to complete the requirements of their program they must complete both the course and its associated co-requisite lab.

U0 Courses for all Non-Quebec B.A. Biology Students. Total Credits 30

Courses for non-Quebec students registered in a B.A. Biology program.

BIO191 Introductory Biology
ELA116 Effective Writing (or other ENG)
HUM Humanities (CLA, ENG, HIS, REL, PHI or Lib. Arts)
7 Free Options

Biology Core: required by all Biology BA students: Total Credits 15

BIO110 Introductory Cellular and Molecular Biology
BIO115 Diversity of Life 1
BIO116 Diversity of Life 2
BIO118 Genetics
PHY101 Statistical Methods

BA "Health Science" Concentration

All students in this program must take the following 2 courses. Total Credits 6.

BIO226 Animal Physiology 1
BIO228 Animal Physiology 2

Students must also take 6 or more courses from the following list. Total Credits 18.

BIO133 Human Anatomy
BIO212 Evolution
BIO252 Bioethics
BIO279 Neuropsychology
BIO280 Psychopharmacology
BIO352 Microbiology
BIO328 Advanced Physiology
BIO349 Medical and Veterinary Entomology
EXS127 Intro to Exercise Physiology
BCH191 Nutrition
PBI327 Psychology of Nutrition
PBI275 Health Psychology I
PBI276 Health Psychology II
PBI288 Brain and Behavior 1
PSY101 Introduction to Psychology I

Free Options: Students must also choose 17 lecture courses from any division. Total Credits 51

BA "Environmental Biology" Concentration

All students in this program must take the following 2 courses. Total 6 credits.

BIO117 General Ecology
BIO212 Evolution

Students must also take 6 or more courses from the following list, a minimum of 4 of which must be from Biology: Total Credits 18.

BIO221 Biogeography
BIO230 Freshwater Biology
BIO248 Invertebrate Zoology
BIO257 Vascular Plants Systematics
BIO270 Vertebrate Zoology
BIO349 Medical and Veterinary Entomology
BIO352 Microbiology
BIO358 Animal Behavior
BIO367 Ichthyology
BCH338 Environmental Biochemistry and Toxicology
ESG127: Introduction to Physical Geography
ESG226 Oceans I
ESG227 Oceans II
ESG250 Geomorphology
ESG251 Soils and Vegetation
ESG265 The Atmosphere and Weather
ESG269 The Earth's Crust
ESG361 Glacial Environments

Free Options: Students must also choose 17 lecture courses from any division. **Total Credits 51**

Biology Minor

The Biology minor consists of eight introductory courses in different specializations in biology, five of which are prescribed, and three are open. It is intended to allow students with a major in another field to obtain a perspective on modern biology.

BIO110 Introductory Cellular and Molecular Biology
 BIO115 Diversity of Life 1
 BIO116 Diversity of Life 2
 BIO117 General Ecology
 BIO118 Genetics

Students must also complete three other Biology courses totaling 9 lecture credits.

Total 24 credits

Note: Only lecture credits are indicated. Any associated laboratories will increase the number of required credits.

Pre-Medical Studies Program

The pre-med program is intended for those students who wish to apply to medical school directly after graduating from Bishop's. This program is not exclusive to Biology but is administered by the department. The pre-med program may be taken by any student at Bishop's; however, it can only be taken as a second concentration and may not be taken on its own. Therefore, students must complete the following list of courses as part of, or in addition to, those requirements necessary to meet the student's primary major/concentration.

93 Credit Program:

Pre-Med Required Science courses: Total 27 Credits. The following courses must be taken in order to meet the requirements of the concentration.

BCH211 Biochemistry I: Proteins
 BCH275 Biochemistry III: Metabolism
 BIO110 Introductory Cellular and Molecular Biology
 BIO226 Animal Physiology I
 BIO228 Animal Physiology II
 CHE105 Organic Chemistry
 CHE106 Organic Chemistry II
 PHY101 Statistical Methods
 PSY101 Introduction to Psychology

Pre-Med Required Non-Science Courses: Total 15 Credits. Students must take the following number of electives from the list below in order to meet the requirements of the concentration.

At least 2 Second Language Courses.
 At least 2 Courses in English Literature.
 At least 1 Course from the Social Sciences.

123-credit program:

Students enrolled in the 123-credit program must take the same courses listed above, plus they must complete the standard list of U0 courses required for BSc students from outside Quebec.

BIO191 Introductory Biology
 CHE191 General Chemistry
 CHE192 General Chemistry II
 PHY193 General Physics I for Life Sciences I

PHY194 General Physics II for Life Sciences II
 MAT198 Calculus I for Life Sciences
 MAT199 Calculus II for Life Sciences
 ELA116 Effective Writing (or other ENG)
 HUM (CLA, ENG, HIS, REL, PHI or Lib. Arts)
 Free Option (One 3 Credit Course from any Division)

COURSES:

PLEASE NOTE: The following list of courses represents those courses which are normally offered by the Department of Biological Sciences. However, some courses alternate and thus are only available every second year. The schedule of such courses is indicated below the course description. Some courses that are not required in Biology programs are not offered on a regular basis. Such courses are indicated with an asterisk (*).

Biology 107 Birds and Behaviour 4-6-6

This course represents an examination of the biology of birds, with emphasis on their behaviour, including singing, territoriality, mate choice, parental care, flocking and migration. Research results on these topics will be used to illustrate fundamental principles of ecology and evolution. Course format will be a mixture of lectures, student-led seminars, laboratory work and field trips. No previous scientific education or knowledge of birds is assumed.

Note: This course cannot be taken for credit by students in Biology or Biochemistry.
 Professor Yezerinac

Biology 110a Introductory Cellular and Molecular Biology 3-3-0

The structure, organization, and molecular genetics of cells; the structure and function of cell organelles; genetic replication and expression; gene mutation; regulation of the cell cycle.

Prerequisite: BIO 191, collegial Biology, or equivalent
 Professor Yezerinac

Biology 113a Field Biology I (only offered in the spring semester) 4-5-30

An intensive, three-week long course in which participants study a wide range of habitats to gain familiarity with plants and animals in the field and to learn methods of field study. Physical aspects of the environment relating to the biota are studied, as well as the plants and animals and their interactions with one another and their environment. Living organisms are brought to the laboratory for further study. Instruction is given five full days per week during a three-week period. Areas of instruction: Mosses and Lichens; Terrestrial Mammals; Insects.

Prerequisite: collegial Biology or equivalent
Offered in odd-numbered years.
 Staff

Biology 114a Field Biology II (only offered in the spring semester) 4-5-30

A course similar to Biology 113a, except that other topics are covered: Forest Ecology, Aquatic Invertebrates; Animal Behavior.

Prerequisite: collegial Biology or equivalent
Offered in even-numbered years
 Staff

Biology 115a Diversity of Life I 3-3-0

This course offers a thorough exploration of one branch of the tree of life, that occupied by multicellular animals. The course complements Diversity of Life II, a winter-term course with a focus on prokaryotic and non-animal eukaryotic life. The material in both courses is organized according to a modern phylogenetic framework. In this course students will learn about phylogenetic hypotheses and evidence, and they will study how classifications are created, tested, and, where necessary, rejected. Focusing on animals, we will discuss many of the morphological and physiological adaptations that have arisen. The evolutionary implications of some features, such as bilateral symmetry and the notochord, will be discussed more thoroughly. Recent advances as well as current contentious issues in animal classification will also be examined.

Prerequisite: collegial Biology or equivalent; Co-requisite: Biology Lab 115a
 Professor Savage

Biology Lab 115a Diversity of Life I Laboratory 1-0-3

The classification, identification, morphology and biology of the animals considered in Biology 115a.

Prerequisite: collegial Biology or equivalent; Co-requisite: Biology 115a
 Professor Yezerinac

Biology 116b Diversity of Life II 3-3-0

Like its companion course Biology 115a, this course explores the tree of life, but from a less animal-centric view. We study the prokaryotes at the root of the tree, responsible for more than half of the earth's biomass. Next, we examine the branch that contains all fungi (and lichens). The various protists and those algae that are not related to green plants form other branches, which we will also explore. Finally, we study in more detail the largest group of eukaryotes by biomass, the green plants. The material in this course (and in Biology 115a) is organized according to a modern phylogenetic framework. The focus will be on diversity, function and ecological importance. In the case of the green plants, we look at the reasons for the tremendous ecological success of this form of life. We examine photosynthesis, transport, reproduction and life cycles, and evolution, empathizing ecological relevance.

Co-requisite: Biology Lab 116b

Professor van Hulst

Biology Lab 116b Diversity of Life II Laboratory 1-0-3

A series of experiments and exercises to complement Biology 116b.

Co-requisite: Biology 116b

Professor Yezerinac

Biology 117a General Ecology 3-3-0

An introduction to modern ecology: environmental patterns, patterns in the distribution of plants and animals, evolution and adaptation, ecosystem function, plant and animal populations, species interactions, community organization, applied ecology.

Prerequisite: collegial biology or equivalent; Co-requisite: Biology Lab 117a

Professor van Hulst

Biology Lab 117a General Ecology Laboratory 1-0-3

Experiments and exercises in General Ecology.

Prerequisite: collegial biology or equivalent; Co-requisite: Biology 117a

Professor King

Biology 118b Genetics 3-3-0

An introduction to the study of biologically inherited traits from three perspectives. (i) Mendelian Genetics: the rules of genetic transmission and heredity. (ii) Molecular Genetics: the biochemical and chromosomal basis of heredity. (iii) Population & Evolutionary Genetics: the variation in genes amongst individuals and populations, heritability, and changes in genes over time.

Prerequisite: Biology 110a; Co-requisite: Biology Lab 118b

Professor Yezerinac

Biology Lab 118b Genetics Laboratory 1-0-3

Experiments in genetics designed to complement topics discussed in Biology 118b.

Prerequisite: Biology 110a; Co-requisite: Biology 118b

Professor Yezerinac

Biology 131* The Human Body in Health and Disease 3-3-0

An introduction to human anatomy and physiology. This course will employ problem-based learning, virtual experiments, and traditional lectures to explain the relationship between the structure of the human body and its functions. These concepts will then be applied to the study of representative human diseases. This course is designed for students with minimal biology backgrounds, including arts students, teachers, coaches, and home-care workers. Students will acquire a working knowledge of human biology and the ability to communicate this knowledge to others.

Prerequisites: Secondary school Biology and/or Chemistry recommended.

Note: This course cannot be taken for credit by students in Biology or Biochemistry.

Professor Hull

Biology 133 Human Anatomy 3-3-0

The anatomy of all of the major body systems will be discussed in the context of human health and disease. This course is designed for students interested in the biomedical sciences or health education. Students will develop their understanding of human anatomy and will acquire the ability to communicate scientific concepts to their patients or students.

Prerequisite or Corequisite: BIO 191 or collegial Biology.

Corequisite: BIL 133. This course cannot be taken for credit by anyone who already has credit for BIO131 or BIO132.

Biology Lab 133 Human Anatomy Lab 1-0-3

This course will give students a solid grounding in vertebrate anatomy through dissections and preserved material. Dissection material will include either in part or whole, several mammalian species including sheep, cat, cow, and pig. Material will focus on the recognition and development of the major organs and systems such as the skeletal, muscle, nervous, reproductive, excretory, and digestive systems. Although general mammalian structure will be examined, the relevance of these structures to human

anatomy will represent the major focus of the course.

Corequisite: BIO 133.

Professor Richardson

Biology 138b The Genetics Revolution 3-3-0

This course is designed for non-science majors to examine the impact of recent genetic discoveries on medicine, agriculture and industry. It will begin with a brief introduction to the genetic organization of all living organisms, the structures of animal, plant and bacterial cells, and the molecular technologies used to alter the genomes of these organisms for scientific and industrial purposes. The use of these technologies in the biotech industry to develop new drugs, diagnostic tests, alter agriculturally important plant species, and enhance forensic identification will be explored. As well, the potential benefits and possible problems associated with these technologies to human society as well as ethical questions arising about the use of these new techniques will be discussed.

This course cannot be taken for credit by students enrolled in programs in Biochemistry, Biology or Chemistry.

Staff

Biology 155a Organic Chemistry for Biologists 3-3-0

An introduction to the chemistry of organic molecules with emphasis on compounds and reactions prevalent in living organisms. Will include an introduction to proteins, lipids, carbohydrates, and nucleic acids.

Prerequisite: Chemistry 191a, 192b, 081a, and 082b; Corequisite: Biology Lab 155a

Not offered in 2006-2007; students should instead register in CHE105a/185a

Professor Stroehrer

Biology Lab 155a Organic Chemistry for Biologists Lab 1-0-3

Extraction, purification, and analysis of different classes of organic molecules. Introduction to different separation techniques including column chromatography, thin layer chromatography, and polyacrylamide gel electrophoresis.

Prerequisite: Chemistry 191a, 192b, 081a, and 082b; Corequisite: Biology 155a

Not offered in 2006-2007; students should instead register in CHE105a/185a

Professor Stroehrer

Biology 191a Introductory Biology 3-3-0

Scientific method, chemistry of life, cell structure, cell metabolism, respiration, photosynthesis, transport systems, origin of life, evolution, genetics, reproduction, taxonomy, diversity of life (including microorganisms, fungi, plants and animals), ecosystems.

BIO 191a is designed for students wishing to major in biology or biochemistry at Bishop's but who lack the appropriate collegial biology course. This course may also be taken for credit by non-biology students as part of their regular program.

This course cannot be taken for credit by B.Sc. students who are enrolled in a 3-year program, nor can it be taken for credit by anyone who already has credit for Biology 193, Biology 199 or PBI191.

Co-requisite: Biology Lab 191a

Professor Richardson

Biology Lab 191a Introductory Biology Laboratory 1-0-3

Experiments and exercises in Introductory Biology. This laboratory course cannot be taken for credit by anyone who already has credit for Bil193 or Bil199.

Co-requisite: Biology 191a

Professor Yezerinac

Biology 193b Introductory Biology for Education Students 3-3-0

BIO193b has essentially the same course content as BIO191a but is designed for education students to provide them with the necessary biological knowledge for teaching biology in the school system.

This course cannot be taken for credit by anyone who already has credit for Biology 191, Biology 199 or PBI 191.

Prerequisites: Secondary school Biology and/or Chemistry are recommended.

Co-requisite: Biology Lab 193b

Staff

Biology Lab 193b Introductory Biology Laboratory for Education Students 1-0-3

BIL193b has essentially the same course content as BIL191a but is designed for education students to provide them with the necessary laboratory biological knowledge for teaching biology in the school system.

This course cannot be taken for credit by anyone who already has credit for BIL191 or BIL199.

Co-requisite: Biology 193b

Staff

Biology 212b Evolution 3-3-0

Possibly the greatest single theory in modern science, evolution influences all aspects of biology from wildlife management to modern medicine. This course will examine both the patterns of evolution as well as the mechanism.

Professor Richardson

Biology 215b Metabolism 3-3-0

Introduction to the basic metabolic pathways of living cells. These include the central metabolic pathways associated with cellular energy generation, carbohydrate degradation and synthesis, fatty acid degradation and synthesis, lipid metabolism and nitrogen metabolism. Emphasis will be placed on the role and regulation of enzymes associated with these pathways.

Prerequisite: collegial biology, Biology 155a or Chemistry 105a/185a and Biology 226a. Co-requisite: Biology Lab 215b.

Students may not take this course for credit if they have received credit for BCH 275b.

Professor Stroehrer

Biology Lab 215b Metabolism Laboratory 1-0-3

This course introduces the student to research approaches in metabolic enzymology and the study of enzyme kinetics. Environmental factors influencing enzyme activity as well as the effects of different inhibitory molecules will be examined. As well, protein isolation and analysis will be covered.

Pre-requisite: collegial biology, Biology 155a or Chemistry 105a/185a and Biology 226a

Co-requisite: Biology 215b

Professor Stroehrer

Biology 217b Advanced Ecology 3-3-0

A second course in ecology that focuses on understanding relations between animals, plants, and microbes. Topics include: population growth and regulation, variation in space and time, predation (including herbivory and adaptations to avoid being eaten), parasitism and disease, symbiosis and mutualism, life history variation, regulation and manipulation of abundance, disturbance, food webs, colonization, conservation, and population viability analysis.

Prerequisite: Biology 117a; Co-requisite Biology Lab 217b

Professor van Hulst

Biology Lab 217b Advanced Ecology Laboratory 1-0-3

Laboratory exercises to accompany Advanced Ecology. We will use 10 exercises in conservation biology using the computer application RAMAS EcoLab. These incorporate real-world ecological problems, and will give the student experience in dealing with complex systems, as well as teaching valuable notions in applied ecology.

Prerequisite: Biology 117a; Co-requisite: Biology 217b

Professor van Hulst

Biology 220* History of Biology 3-3-0

An outline of biological discovery from early times to the present in relation to social, historical and cultural developments.

Prerequisites: Biology 110a, Biology 115a, Biology 116b, Biology 117a, Biology 118b Staff

Biology 221b Biogeography 3-3-0

The main goals of this course are to study spatial patterns of biodiversity and to attempt to reconstruct the origin and the present distribution of both extinct and extant taxa. We start by examining the modern distribution of selected groups of plants and animals, as well as the distribution and limits of the major biomes. We proceed with an overview of the major changes in the earth's climate and topology through geological times, and conclude with the impact of these historical changes on the evolution and the distribution of plants and animals. Techniques in biogeographical analysis will be taught and the students are expected to carry out a group project on the biogeographic history of a specific group of plants or animals. Topics such as extinction, adaptive radiation and island biogeography will also be covered.

Prerequisites: Biology 115a

Pre or Co-requisite: Biology 212

Professor Savage

Biology 224b Animal Physiology I 3-3-0

This course will review the broad subject of cancer development and treatment. In particular it will focus on taking concepts seen in cell biology (Bio110) and applying them to cancer cells. Among the topics reviewed will be: cancer types and staging, mutation rates and environmental contributions to genetic changes, oncogenes and tumor suppressors, cell proliferation/death balance, modification of cancer cells phenotypes and metastases formation, role of the immune system in the prevention of cancer spreading, strategies of cure, and a review of the body's physiological responses to several forms of cancer.

Prerequisites: BIO 110 Introductory Cell and Molecular Biology and BIO 226 Animal Physiology I

Biology 226a Animal Physiology I 3-3-0

Basic mechanisms of homeostatic regulation. Topics include: Cell physiology, Nervous system, Muscular system, the Endocrine system, and the Cardiovascular system.

Prerequisite: Biology 110a; Co-requisite: Biology Lab 226a

Students who have received credit for Biology 216a cannot also receive credit for Biology 226a.

Professor Hull

Biology Lab 226a Animal Physiology I Laboratory 1-0-3

Experiments designed to examine the physiological systems discussed in Biology 226a.

Prerequisite: Biology 110a; Co-requisite: Biology 226a

Professor Hull

Biology 228b Animal Physiology II 3-3-0

Mechanisms of functional operation of animal organisms. Topics include: renal, respiratory, gastrointestinal, and reproductive function.

Prerequisite: Biology 226a; Co-requisite: Biology Lab 228b

Students who have received credit for Biology 344b cannot also receive credit for Biology 228b

Professor Hull

Biology Lab 228b Animal Physiology II Laboratory 1-0-3

Experiments dealing with different aspects of animal physiology. Some experiments will be performed using computer simulations.

Prerequisite: Biology 226a Co-requisite: Biology 228b.

Students who have received credit for Biology Laboratory 344b cannot also receive credit for Biology Lab 228b.

Professor Hull

Biology 230a Freshwater Biology 3-3-0

This course will expose students to the biological importance and diversity of freshwater systems. Class material will look at both the biotic and abiotic components of aquatic systems as well as their interactions.

Prerequisite or Co-requisite: Biology 115a; Co-requisite: Biology Lab 230a

Offered in even-numbered years

Professor Richardson

Biology Lab 230a Freshwater Biology Lab 1-3-0

The lab section will focus on the different techniques necessary for sampling both lentic and lotic systems. Emphasis will be placed on practical first-hand experience using the appropriate equipment in the field. The process of data collection will culminate in the students performing a mini-research project on a local aquatic system of their choice and presenting these data to their peers.

Prerequisite or Co-requisite: Biology 115a; Biology 117a; Co-requisite: Biology 230a

Offered in even-numbered years

Professor Richardson

Biology 248b Invertebrate Zoology 3-3-0

Morphology, physiology, embryology, evolution and classification of invertebrate animals.

Prerequisite: Biology 115a; Co-requisite: Biology Lab 248b

Professor Savage

Biology Lab 248b Invertebrate Zoology Laboratory 1-0-3

The classification, identification, morphology and biology of the animals considered in Biology 248b.

Prerequisite: Biology 115a; Co-requisite: Biology 248b

Professor Savage

Biology 252* Bioethics 3-3-0

Ethical aspects of modern biology, biotechnology, and medicine. Topics to be discussed: Use and abuse of biology, Transgenics and the changing world, Medical science today, Biology and Culture, Sociobiology, Limits to scientific inquiry. The animal rights controversy, cloning controversy, ethical imperatives, environmental issues, and medical ethics will be explored.

Prerequisite: Biology 110a or permission of instructor

Note: This course restricted to Biology, Biochemistry and Chemistry majors.

Professor Stroehrer

Biology 257a Vascular Plant Systematics 3-3-0

Evolution, taxonomy, morphology, and anatomy of the vascular plants.

Prerequisite: Biology 116b; Co-requisite: Biology Lab 257a

Offered in even-numbered years

Professor van Hulst

Biology Lab 257a Vascular Plant Systematics Laboratory 1-3-0
Exercises in identification and classification of vascular plants: use of floras and identification keys, computer keys, and programs for numerical classification; morphology and anatomy of vascular plants.
Prerequisite: Biology 116b; Co-requisite: Biology 257a
Offered in even-numbered years
Professor van Hulst

Biology 270a Vertebrate Zoology 3-3-0
Evolution, classification, morphology, and physiology of the various classes of vertebrates. Particular attention will be placed upon the integumentary, skeletal, muscular, respiratory, digestive, excretory, and reproductive systems.
Prerequisite: Biology 115a; Co-requisite Biology Lab 270b
Offered in odd-numbered years
Professor Richardson

Biology Lab 270a Vertebrate Zoology Laboratory 1-0-3
The lab component will expose students to the diversity of vertebrates around them. Vertebrate diversity and behavior will be studied through a series of field trips, while basic anatomy will be examined in more detail in the lab through dissections and preserved mounts.
Prerequisite: Biology 115a; Co-requisite: Biology 270b
Professor Richardson

Biology 272a Scientific Writing for the Life Sciences 3-3-0
This course is intended for Honours Biology students and will instruct them in the writing, revision and various forms of presentation of scientific research. Lectures will introduce the scientific method and train students to critically read the scientific literature. Detailed examples of a written paper will then follow with step-by-step instructions. Data analysis, word processing and citation methods will be reviewed. In addition to written manuscripts, poster and oral presentations will be discussed.
Prerequisite: This course is normally open to U2 or U3 students by permission of departmental chair or instructor.
Staff

Biology 291b Evaluating Scientific Evidence 3-3-0
In science we often have to decide whether data favor one hypothesis or another. This is easy if our evidence excludes all but one hypothesis. In practice we often face a harder task: several hypotheses remain that are compatible with the data, although one may seem the more “likely” one. How do we evaluate which one is more likely in the light of the data, and what exactly does “more likely” mean here? This course examines tools designed to help us in selecting the hypothesis that receives most support from the data: Neyman-Pearson P-values, Fisherian P-values, Bayesian posterior probabilities, confidence intervals, Bayesian credible intervals, and information-based criteria like AIC and BIC. You will learn how to calculate and how to interpret P-values and true measures of evidence, and how to use them in your own research.
Prerequisite: PHY101a
Professor van Hulst

Biology Lab 291a Planning and Analysis of Biological Experiments Laboratory 1-0-3
The laboratory provides hands-on training in setting up experiments and analyzing their results using the open-source statistical language R. This is widely used in both academic and industrial settings, is powerful, and is freely available. It provides many tools for experimental design, data analysis, and graphical presentation.
Corequisite: BIO291a
Dr. Robert van Hulst

Biology 310b Advanced Cell Biology 3-3-0
Topics in modern cell biology. Examines aspects of eukaryotic cell structure and function. Includes, but not restricted to, areas such as intracellular signaling, cell-cycling and cancer, endocytosis, protein targeting and organelle biogenesis.
Prerequisite: Biology 110a, Biology 118b
Offered in even-numbered years
Professor Hull

Biology 314b Biotechnology 3-3-0
This course will explore the technical approaches used in current research and biotechnology, emphasizing the applications of molecular strategies and processes studied in Biology 360. Both the theoretical and practical aspects of these molecular approaches will be discussed, as well as how these techniques are utilized and how they have changed modern research and medicine.
Prerequisite: Biology 360a or Biochemistry 370
Co-requisite: Biology Lab 314b
Professor Stroehrer

Biology Lab 314b Biotechnology Laboratory 1-0-3
Practical application of several of the techniques introduced in Biology 314.
Prerequisite: Biology 360a or Biochemistry 370
Co-requisite: Biology 314b
Professor Stroehrer

Biology 320b Programmed Cell Death 3-3-0
Programmed cell death, also called apoptosis, is a normal physiological process that takes place in every type of cell in the animal kingdom. It plays a critical role in embryo development, in selective processes (immune system), in degenerative diseases and in cancer. Since the early 90's, programmed cell death is one of the fastest growing subject of research, with almost 15000 scientific publications in 2004. In this course, we will explore normal and impaired mechanisms involved in cell death, through examples taken in human medicine or in invertebrates' development.
Prerequisite: Biology 110

Biology 328b Advanced Physiology 3-3-0
This course will examine how animals adapt to environmental stresses such as extremes of temperature of altitude, hypoxia, water limitation and dietary changes. Short-term (acute), medium-term (acclimatory) and chronic (evolutionary) adaptations will be discussed.
Pre-requisite: Biology 226a; Pre-or Co-requisite: Biology 228b
Offered in odd-numbered years
Professor Hull

Biology 330* Ornithology 3-3-0
An introduction to the study of birds, including their structure, function, reproduction, evolution and classification. The integration of morphological, physiological, and behavioral adaptations will be emphasized. In addition, topics of particular relevance to birds such as mechanisms of flight, migration, vocal communication, and conservation will be discussed.
Prerequisite: Biology 115a; Co-requisite: Biology Lab 330
Professor Yezerinac

Biology Lab 330* Ornithology Laboratory 1-0-3
Study of bird morphology using preserved specimens and museum study skins. Field trips will be used to learn about living birds and their identification.
Prerequisite: Biology 115a; Co-requisite: Biology 330
Professor Yezerinac

Biology 333a Advanced Exercise Science 3-3-0
This course examines selected topics in Exercise Physiology. Through traditional lectures, directed readings, seminars, and case studies, students will study short-term and long-term adaptations to exercise. We will also examine the scientific principles underlying sports-related topics such as optimizing exercise performance, injuries, and injury repair.
Prerequisite: Biology 226 or Exercise Science 127
Co-requisite: Biology Laboratory 333
Note: See Exercise Science 373. Students may not take this course for credit if they have received credit for EXS 373.
Professor Hull

Biology Lab 333 Advanced Exercise Science Laboratory 1-0-3
The labs will introduce students to functional and clinically applied anatomy and physiology. They will experience evaluation and treatments of various musculoskeletal conditions, with an emphasis on sports related injuries. The student will work in both clinical and field settings. Case studies, injury reporting, and injury research will enable the student to learn independently and apply lecture material.
Co-requisite: Biology 333
Note: See Exercise Science 383. Students may not take this course for credit if they have received credit for EXS 383.
Professor King

Biology 345* Plant Physiology 3-3-0
Nutrition, transport, growth and development in plants; the water relations of plants; mineral nutrition; growth regulators; tropisms; photoperiodism; vernalization and dormancy.
Prerequisite: Biology 116b
Professor van Hulst

Biology 349a Medical and Veterinary Entomology 3-3-0
As one of the most important group of vectors, insects, ticks and mites are involved in the transmission of numerous viruses, protozoans and bacteria causing diseases such as malaria, the plague, sleeping sickness, scabies, West Nile fever, and Lyme disease. This course will introduce students to some of the basic concepts of entomology but with a focus on the biology and control of those groups causing harm to humans and their domestic animals.
Prerequisite BIO 115

Biology 350 Invertebrate Physiology 3-3-0

This course provides an overview of some physiological mechanisms of invertebrates including digestion and nutrition, respiration, excretion, reproduction, circulation, locomotion, and behavior. We will also consider some of the unique strategies used by invertebrates which allow them to thrive in Earth's most extreme and challenging environments: deserts, frozen wastelands, deep ocean floors, hot vents, inside other organisms, and hypersaline lakes.

Prerequisite: BIO 115.

Biology 352a Microbiology 3-3-0

An introduction to prokaryotic microorganisms, eukaryotic microorganisms, and viruses; their ecology, growth characteristics, and host interactions. Examination of the environmental roles of microbes as well as their impact on the human world.

Prerequisite: Biology 110a; Co-requisite: Biology Lab 352a

Offered in even-numbered years

Professor Stroehrer

Biology Lab 352a Microbiology Laboratory 1-0-3

An introduction to common microbiological techniques used in medical, biological and biochemical research, including techniques in growth, staining and identification of bacteria and viruses. As well, the diversity of physiological and metabolic requirements of bacteria will be examined.

Prerequisite: Biology 110a; Co-requisite: Biology 352a

Offered in even-numbered years

Professor Stroehrer

Biology 353 Principles of Parasitism 3-3-0

An overview of parasite biology, with special emphasis on eukaryotic parasite diversity, ecology and host-parasite interactions (biochemistry, immunology, physiology, and pathology). We will also consider population / community ecology and evolutionary implications for parasites and their hosts. The course material is complemented by a lab, BIL 353.

Biology Lab 353 Principles of Parasitism Lab 1-0-3

The taxonomy, morphology, life cycles, and histopathology of commonly occurring protozoan and metazoan parasites of humans and domestic animals. Designed to give the student hands on experience, the laboratory will include the examination of prepared specimens and necropsy (=dissection) of hosts, and experiments exploring the effects of parasites on host physiology.

Biology 354 Insect Biodiversity 3-3-0

With close to a million described species, insects form more than 70% of animal diversity. But in spite of such overwhelming diversity they are poorly known and consequently often excluded from biodiversity studies. The main goal of this course is to teach the students how to collect, preserve and identify insects, especially those found in eastern North America. In addition to using material housed in the Bishop's insect collection, material collected in the field by each student will be prepared in a fashion that will make the specimens museum worthy. Through the collecting and identification process, students will learn about insect taxonomy but they will also learn about where different taxa can be found and what their general ecological requirements are. Once they have completed the course, students should be able to identify most commonly encountered insects at least to the family level and recognize those that are beneficial or potentially harmful.

Prerequisite: BIO 115

Biology 358b Animal Behaviour 3-3-0

The study of animal behaviour represents the oldest known form of biological study. Even from our earliest beginnings, humans had an intense interest in understanding how animals behave. This interest is still evident from our almost instinctive need to share our homes with various pets. This course will build on this most basic need to watch and understand animal behaviour, but will do so from a more scientific approach.

Prerequisite: Biology, 115a, Biology 117a; Co-requisite: Biology Lab 358b

Offered in odd-numbered years

Professor Richardson

Biology Lab 358b Animal Behaviour Labs 1-0-3

Using videos and experimental labs, students will further explore many of the concepts and topics discussed in the class.

Prerequisite: Biology 115a, Biology 117a; Co-requisite: Biology 358b

Offered in odd-numbered years

Professor Richardson

Biology 359a Human Genetics 3-3-0

Cytogenetics, biochemical genetics, Mendelian genetics, molecular genetics and quantitative genetics of humans; chromosome mapping; genetics and medicine.

Prerequisite: Biology 118b

Offered in even-numbered years

Staff

Biology 360a Molecular Genetics 3-3-0

The molecular biology of nucleic acids and proteins, including DNA replication, mutation, and recombination; RNA transcription; and protein synthesis. Also covered will be protein/nucleic acid interactions and regulation of gene expression.

Prerequisite: Biology 118b

Students may not take this course for credit if they have received credit for BCH 370a.

Professor Stroehrer

Biology 365b Developmental Biology 3-3-0

Examination of the molecular events involved in the development of vertebrates, invertebrates and plants, emphasizing common strategies used in these three systems. Topics will include establishment of body axes, origin of germ layers, and segmental pattern formation. The role of developmental genes, regulatory gene families, and maternal effect genes will be emphasized. Morphogenesis and early cell differentiation will also be studied.

Prerequisite: Biology 110a; Biology 118b

Offered in even-numbered years

Professor Stroehrer

Biology 367a Ichthyology: The World of Fishes 3-3-0

A survey of fishes of the world. Fish taxa representing freshwater, marine, temperate, tropical and deep sea forms will be examined in terms of their morphology, phylogeny, behavioural ecology and community structure. Adaptations associated with the successful occupation of diverse aquatic habitats within the group as a whole will be discussed. In addition, within-taxa global distribution patterns will be examined in light of current theories regarding plate tectonics and zoogeography.

Prerequisite: collegial biology, Biology 115a; Co-requisite: Biology Lab 367a

Offered in even-numbered years.

Professor Richardson

Biology Lab 367a Ichthyology Laboratory 1-0-3

The identification of fishes, with the use of keys based on the characteristics of major groups. Practical techniques will include the preservation, clearing and staining of whole fishes for skeletal features. Other laboratory exercises will include examinations of fish anatomy, behaviour and development.

Prerequisite: collegial biology, Biology 115a; Co-requisite: Biology 367a

Offered in even-numbered years.

Professor Richardson

Biology 371a Independent Studies in Biology I 3-1-3

This course is not normally offered and is only meant for final-year students who wish to pursue in-depth study of a particular area of biology or who have a special need for a biology course that would otherwise not be available during their final semester of course work. This course can only be done in close collaboration with a faculty advisor from within the Department of Biological Sciences, and may not be used as a supplement to a student's honours project. Requirements for this course will be agreed upon by at least three professors from within the Department of Biological Sciences.

Pre-requisite: Consent of a member of the Department of Biological Sciences.

Biology 372b Independent Studies in Biology II 3-1-3

This course represents an additional semester of independent work, either a continuation of or a separate course from Bio 371a, meant for final-year students who wish to pursue in-depth study of a particular area of biology or who have a special need for a biology course that would otherwise not be available during their final semester of course work. This course can only be done in close collaboration with a faculty advisor from within the Department of Biological Sciences, and may not be used as a supplement to a student's honours project. Requirements for this course will be agreed upon by at least three professors from within the Department of Biological Sciences.

Pre-requisite: Consent of a member of the Department of Biological Sciences.

Biology 379a Clinical Neuropsychology 3-3-0

Neuropsychology is the study of the relationship between brain structures and behaviour. In this course we will explore the neuroanatomical correlates of both normal and abnormal behaviors in humans. Among the topics to be discussed are the behavioral sequelae of head injury, mood disorders associated with regional trauma and epilepsy, sex differences in cerebral organization, cerebral asymmetries, language and aphasia, and the various disorders of perception. Depending on the interests of the students, special topics include dyslexia, alexithymia, Alzheimer's disease, alcoholism, and schiz-

ophrenia.

Students who have taken PBI279 or BIO279 (Neuropsychology) may not take this course for credit

Prerequisite: PBI288b or permission of instructor

Professor Drumheller

Biology 380b Psychopharmacology 3-3-0

This course is designed to introduce students in psychology and the natural sciences to the field of neuropsychology. Emphasis will be placed on the relationships between psychoactive drugs, their mechanisms of action in the nervous system, and human behavior. Following an analysis of the principles of pharmacology and pharmacokinetics, as well as the mechanisms of drug tolerance and dependence, the cognitive, emotional and behavioral aspects of specific classes of drugs will be examined. These classes of drugs will include sedatives, hypnotics, stimulants, narcotics, psychomimetics, psychedelics, and hallucinogens.

Students who have taken PBI 280 or BIO280 (Psychopharmacology) may not take this course for credit

Prerequisite: PBI288b or permission of the instructor

Professor Drumheller

Biology 462a/b Honours Biological Problems 3-1-6

An introduction to the planning, execution and reporting of biological research. Each student is required to choose a research problem and, in consultation with a departmentally approved supervisor, draw up a formal research proposal of work to be undertaken. The final mark in this course will be based on the research proposal, preliminary research completed on the stated project, and presentation of a poster during the final week of classes. Satisfactory completion of Biology 462 with a minimum mark of 75% will permit enrollment in Biology 463.

Prerequisite: Permission of course coordinator. (Professor van Hulst)

Co-requisite: Biology 272a

Biology 463a/b Advanced Honours Biological Problems 3-1-6

A continuation of Biology 462, in which the student will complete all research as outlined in the research proposal. The final mark in this course will be based on the quality and amount of research completed, presentation of a departmental seminar during the final week of classes, open to the public, based on research findings, and submission of a final written honours thesis. Enrollment in Biology 463 is conditional upon completing Biology 462 with a minimum mark of 75%.

Prerequisite: Permission of course coordinator. (Professor van Hulst)

Cognate courses

Biochemistry 336b (Immunology) is a cognate biology course.

Chemistry

The Chemistry Department offers three distinct programs — Chemistry Honours, Chemistry Major, and Chemistry Minor. All of our programs provide students with a balanced, rich, and practical education in all sub-disciplines of Chemistry (Analytical, Biochemical, Environmental, Inorganic, Organic, and Physical) and students graduating with a Chemistry degree from Bishop's University have had an excellent record of being admitted to graduate schools and professional programs (Medicine, Dentistry, Pharmacy, Education, etc.) or in finding employment in their field.

Class sizes in chemistry courses are small, which promotes close personal contact between members of the faculty and students. The faculty are also heavily involved in undergraduate laboratories, which enhances this personal contact and results in a friendly and very productive learning experience in experimental chemistry.

The Chemistry Department has an excellent set of modern instruments (eg. 400 MHz NMR), computers, and other equipment which is used by undergraduates in their laboratory courses and in research projects. This is in contrast to large universities where many instruments are reserved for graduate students only. Students at Bishop's learn much from their extensive use of modern instrumentation and equipment, and benefit greatly from this knowledge in future employment and graduate studies.

Entrance Requirements

To enter a Chemistry program, a student must normally have a Quebec collegial diploma (D.E.C.) in science, or the equivalent, including Mathematics NYA, NYB, Physics NYA, NYB, Chemistry NYA, NYB, and Biology NYA. Students having these prerequisites can normally complete their undergraduate programs in three years. Students entering a degree program with CEGEP Chemistry BFA and Chemistry BFB are exempted from Chemistry 105a and 185a but must include Chemistry 106b and 186b plus an additional one-semester chemistry lecture course in their program; students entering a degree program with CEGEP Chemistry BFA only, must include Bishop's Chemistry 105a, 185a, 106b, and 186b in their program.

Undergraduate Programs

It is strongly recommended that students enrolled in Department of Chemistry programs follow the order of courses outlined in the tables below. Some Chemistry courses are offered on two-year rotations, so failure to follow the suggested course sequence may result in students not being able to fulfill their degree requirements in the normal time frame.

The suggested course sequences are based on the year in which the student begins their U1 year of study.

Students entering four-year degree programs (in some cases after completion of Ontario OSSD, grade 12 in other provinces or the US, or equivalent) must register in the required collegial equivalent science courses.

Fall

BIO191 / BIL191
CHE191 / CHE081
MAT191
PHY191 / PHY081

Winter

BCH192
CHE192 / CHE082
MAT192
PHY192 / PHY082

** Students must also take ELA116 and another 3-credit humanities elective (English, History, Classical Studies, Philosophy, Religion, or Liberal Arts).*

Programs

Chemistry Honours

The Chemistry Honours program fulfills the academic requirements for membership in the Chemical Institute of Canada and for accreditation by l'Ordre des chimistes du Québec. (For membership in the latter, it is necessary to possess a working knowledge of the French language.) The Chemistry Honours program is a three-year program that prepares a student for graduate studies in chemistry, and, with appropriate electives, for Medicine and Dentistry, as well as for direct professional employment. The program requires 28 three-credit one-semester courses, or their equivalent, for a total of 84 course credits, plus 13 credits for associated laboratory courses, for a total of 97 credits overall. The 84 course credits are divided as follows:- 57 credits of required chemistry (plus 13 lab credits); 6 credits of biochemistry; 3 credits of mathematics, and 18 credits of free options.

Entrance Requirements for Honours

To be eligible to enter the U2 year of the Honours Chemistry program, a student must achieve a minimum average of 65% in the required U1 Chemistry courses (CHE 102, 103/183, 104/184, 105/185, 106/186, 144, 189); to be eligible to enter the U3 year of the Honours Chemistry

program, a student must achieve a minimum average of 65% in the U2 required Chemistry courses (CHE 221/281, 222/282, 223/283, 224/284, 225/385, 227/287, 244/248, 386). Students who satisfy these requirements and pass all required courses and optional courses in the program, are eligible for the Honours Chemistry degree.

Students entering U1 in an odd-numbered year
(e.g. 2009, 2011, 2013, etc.)

	Fall	Winter
U1	CHE103 / CHE183 CHE104 / CHE184 CHE105 / CHE185 MAT106 Option	CHE102 / CHE189 CHE106 / CHE186 CHE144 CHE223 / CHE283 BCH211
U2	CHE221 / CHE281 CHE225 / CHE385 CHE227 / CHE287 BCH275 CHE224 / CHE284 Option Option	CHE244 / CHE248 CHE226 / CHE386 Option
U3	CHE222 / CHE282 CHE477 CHE489 Option	CHE461 CHE464 CHE489 Option

Students entering U1 in an even-numbered year
(e.g. 2010, 2012, 2014, etc.)

	Fall	Winter
U1	CHE103 / CHE183 CHE104 / CHE184 CHE105 / CHE185 MAT106 Option	CHE102 / CHE189 CHE106 / CHE186 BCH211 Option Option
U2	CHE222 / CHE282 CHE225 / CHE385 CHE227 / CHE287 Option Option	CHE223 / CHE283 CHE144 CHE226 / CHE386 BCH275 Option
U3	CHE221 / CHE281 CHE224 / CHE284 CHE477 CHE489	CHE244 / CHE248 CHE461 CHE464 CHE489

Chemistry Major

The Chemistry Major program prepares students for industrial or other employment that requires a knowledge of chemistry. The program has sufficient flexibility to allow students to obtain a second major or a minor in another academic discipline. The program fulfills the academic requirements for membership in the Chemical Institute of Canada and for accreditation by l'Ordre des chimistes du Québec.

(For membership in the latter, it is necessary to possess a working knowledge of the French language.) Students in the Chemistry concentrations of Biochemistry can, by choosing appropriate electives, also meet the accreditation standards of the CIC and the OCQ. The three-year Chemistry Major program requires 28 three-credit one-semester courses, or their equivalent, for a total of 84 course credits plus 13 credits for associated laboratory courses, for a total of 97 credits overall. The 84 course credits are divided as follows: 42 course credits of required chemistry courses (plus 13 lab credits), 6 credits of biochemistry, 3 credits of mathematics, 12 optional science credits, and 21 credits of free options. Students in a minor program in another division may, with permission of the Department, increase free options to a maximum of 27 credits, and reduce science options to a minimum of 6 credits.

Students entering U1 in an odd-numbered year
(e.g. 2009, 2011, 2013, etc.):

	Fall	Winter
U1	CHE103 / CHE183 CHE104 / CHE184 CHE105 / CHE185 MAT106 Option	CHE102 / CHE189 CHE106 / CHE186 CHE144 CHE223 / CHE283 BCH211
U2	CHE221 / CHE281 CHE225 / CHE385 CHE224 / CHE284 CHE227 / CHE287 Option	CHE244 / CHE248 BCH275 / CHE386 Option Option Option
U3	CHE222 / CHE282 CHE277 Option Option	Option Option Option Option

Students entering U1 in an even-numbered year
(e.g. 2010, 2012, 2014, etc.):

	Fall	Winter
U1	CHE103 / CHE183 CHE104 / CHE184 CHE105 / CHE185 MAT106 Option	CHE102 / CHE189 CHE106 / CHE186 BCH211 Option Option
U2	CHE222 / CHE282 CHE225 / CHE385 CHE227 / CHE287 Option Option	CHE223 / CHE283 CHE144 BCH275 / CHE386 Option Option
U3	CHE221 / CHE281 CHE224 / CHE284 CHE277 Option	CHE244 / CHE248 Option Option Option

Chemistry Minor

A Chemistry Minor will be awarded for the completion of CHE 102, 103/183, 104/184, 105/185, 106/186, 144, 189 together with 2 one-semester 3-credit courses plus their corresponding 1-credit laboratory courses chosen from CHE 221/281, CHE 222/282, CHE 223/283, 224/284, 225/385, 226/386, 227/287, 244/248, for a total of 31 credits, including lab credits. Students taking a Chemistry Minor have a one-lecture course (3 credits) reduction towards the credits necessary for their degree.

Recommended Electives

Mathematics 107 and 108 and Physics 101 are recommended science options for students who wish to pursue further mathematical and / or statistical studies.

Physics 106 and 186 are recommended for students who have not completed CEGEP physics.

A significant amount of the chemical literature is in German and students, particularly Honours students, are recommended to take a course in German.

Concentrations in Chemistry

Chemistry concentrations are available to students pursuing degrees in Biochemistry and Environmental Science. Further information on these programs can be found in the Biochemistry and Environmental Science sections of this calendar.

Accreditation by l'Ordre des Chimistes du Quebec and the Canadian Institute for Chemistry

The OCQ and CIC are professional orders that oversee and accredit Chemistry, Biochemistry, and related disciplines in Quebec and Canada respectively. In order to meet the accreditation standards of these orders, a student must meet the following criteria.

L'Ordre des Chimistes du Quebec

A student must earn a minimum of 45 credits in Chemistry, of which 12 credits must be for laboratory work. The OCQ considers 3 credits of course work to be the equivalent of 45 hours of class time (3 course credits in Chemistry at Bishop's is 36 hours of class time) and 1 credit of laboratory work to be the equivalent of 45 hours of lab time (1 lab-credit in Chemistry at Bishop's is 40-50 hours). The chemistry credits are divided in the following manner.

1. 6 course credits and 3 lab credits of physical chemistry.
2. 6 course credits and 3 lab credits of analytical chemistry.
3. 6 course credits and 3 lab credits of organic chemistry.
4. 6 course credits and 3 lab credits of inorganic chemistry.
5. 3 course credits of biochemistry.
6. 3 course credits of industrial chemistry
(environmental chemistry)
7. 3 course credits of ethics (environmental chemistry)

Canadian Institute for Chemistry

The CIC expects a program to involve a total of about 1000 hours of laboratory and classroom work in chemistry, with the minimum hours of each being about 400. The laboratory hours should be distributed in such a way that every student is exposed to meaningful laboratory experience in at least four (and preferably five) of the five sub-disciplines.

The core program beyond the first-year level shall include the equivalent of a one-year course in at least three of the five sub-disciplines of analytical chemistry, biochemistry, inorganic, organic and physical chemistry, but with a minimum of a one-semester course in each of these sub-disciplines. In addition, there should be a selection of advanced offerings in the core disciplines and in other subjects such as for instance theoretical chemistry, solid state chemistry, natural products, polymers, advanced instrumentation, research thesis, etc. to bring the total number of hours of instruction to that described above. The program must also include the equivalent of at least a one-year course in mathematics (calculus), at least one additional one-semester course in mathematics, statistics or computer science, and at least one full-year course in calculus-based physics. The inclusion of other cognate science subjects as well as some liberal arts requirements is to be encouraged.

Master of Science (M.Sc.) in Chemistry

Entrance Requirements

Students who have completed a Bachelors degree in Chemistry or Chemical Engineering with at least a B average (70%) will be considered for admission into the M.Sc. degree program at Bishop's. If the Bachelor's degree is not the equivalent of an *honours Chemistry* degree (for example, the student has only completed a *major* in Chemistry) the student may be required to take additional courses at the Bachelors or Masters level. Students who have been admitted will be assigned, in consultation, a supervisor by the Chair of Chemistry. Current areas of research in the department include synthesis of silicon carbide based semiconducting materials, synthesis of carbon-nitrogen containing heterocycles and their complexation to transition metal centers.

Course Requirements

The M.Sc. degree requires the successful defense of a thesis (15 credits), participation in the seminar series (18 credits), and the completion of a minimum of 12 credits in course work, plus any additional courses required upon admission (see paragraph above). Course selection is determined in consultation with the thesis supervisor and departmental chair. All M.Sc. students must make an oral presentation and defense of their thesis before graduating. The normal period for completion of the M.Sc. degree requirements is two academic years (four semesters). The minimum number of graduate level credits required to complete the program is 45.

Students enrolled in the M.Sc. in Chemistry at Bishop's University can also enroll in graduate courses offered by the Department of Chemistry at l'Universite de Sherbrooke. Please note that instruction in these courses is in French, but that course texts are generally in English. Students enrolled in graduate courses at UdeS are entitled to write assignments, exams, and any other course requirements in either official language (French and English).

Course Prerequisites

The normal prerequisites for each course are listed. Students not having the appropriate prerequisite may be admitted to a course with permission of the instructor.

Chemistry 191a	General Chemistry I	3-3-0	Chemistry 185a	Organic Chemistry Laboratory I	1-0-4
A course for students lacking collegial Chemistry NYA or the equivalent. Atoms, molecules, and ions. Chemical formulae and equations. Thermochemistry. Gases. Electronic structure of atoms. Periodic Table and properties of elements. Chemical equilibrium. Physical properties and structure. Liquids and solids. Phase equilibria. <i>Co-requisite: CHE 081.</i> <i>Professor Wood</i>			Experiments in the separation and purification of organic compounds including the use of chromatography. Introduction to functional group analysis and organic synthesis. <i>Co-requisite: CHE105.</i> <i>Professor Yeats</i>		
Chemistry 081a	Introductory Chemistry Laboratory I	1-0-4	Chemistry 106b	Organic Chemistry II: Introductory	3-3-0
A series of experiments in Introductory Chemistry to complement Chemistry 191a which must be taken concurrently. <i>Co-requisite: CHE191.</i> <i>Professor Gagnon</i>			This course is a continuation of Chemistry 105a and will elaborate upon the chemistry of the organic functional groups and their involvement in organic synthesis, emphasizing the importance of electronic factors (resonance, induction, acidity, electrophiles, nucleophiles, leaving groups, and carbenium ions) in influencing organic reaction mechanisms. Spectroscopic analysis (NMR, IR) and the importance of molecular orbitals are introduced briefly. <i>Prerequisite: CHE105 or Collegial Chemistry BFB</i> <i>Co-requisite: CHE 186.</i> <i>Professor Yeats</i>		
Chemistry 192b	General Chemistry II	3-3-0	Chemistry 186b	Organic Chemistry Laboratory II	1-0-4
A course for students lacking Collegial Chemistry 201 or its equivalent. Solutions. An introduction to thermodynamics. Chemical bonding. Molecular shapes. Kinetics. Ionic equilibria. Electrochemical cells. Nuclear reactions. An introduction to Organic Chemistry. <i>Prerequisites: CHE191 and MAT191 (or permission of instructor) or Collegial Chemistry and Mathematics.</i> <i>Co-requisite: CHE 082.</i> <i>Professor Wood</i>			Further experiments in organic synthesis and in chromatographic separations. An introduction to multi-step synthesis. <i>Co-requisite: CHE106.</i> <i>Professor Yeats</i>		
Chemistry 082b	Introductory Chemistry Laboratory II	1-0-4	Chemistry 108	Introductory Organic Chemistry	6-6-0
A series of experiments in Introductory Chemistry to complement Chemistry 192b which must be taken concurrently. <i>Co-requisite: CHE192.</i> <i>Professor Gagnon</i>			This full lecture course in Organic Chemistry is offered only during the two six-week summer sessions. An introduction to the chemistry of carbon compounds; structure, nomenclature, reactions, and spectroscopy of the common organic functional groups; an introduction to the chemistry of lipids, carbohydrates, amino acids, proteins, and other biologically important molecules; stereochemistry, reaction mechanisms (addition, substitution, elimination, and oxidation-reduction), and the synthesis of organic molecules will be emphasized throughout. <i>Students may not have University credit for both CHE108 and other introductory organic chemistry courses (CHE105 or CHE106 or CHE107).</i> <i>Prerequisite: Collegial Chemistry NYA and NYB or their equivalent.</i> <i>Co-requisite: CHE188.</i> <i>Professor Yeats</i>		
Chemistry 102b	Inorganic Chemistry I	3-3-0	Chemistry 188	Organic Chemistry Laboratory	1-0-4
The principles of nuclear, atomic, metallic, ionic, molecular structure. Valence bond and molecular orbital theory. Molecular and orbital symmetry. <i>Prerequisites: CHE191 and CHE192 or Collegial Chemistry NYA and NYB.</i> <i>Professor Scarlete</i>			This course in practical organic chemistry is offered only during the two six-week summer sessions. Experiments in the separation and purification of organic compounds, including the use of chromatography. Introduction to functional group analysis and the preparation of organic molecules, including multi-step organic synthesis. <i>Students may not have University credit for both CHE188 and CHE185.</i> <i>Co-requisite: CHE108.</i>		
Chemistry 103a	Physical Chemistry I	3-3-0	Chemistry 189b	Instrumental Analysis Laboratory I	1-0-4
Ideal and real gases; chemical kinetics and mechanism; an introduction to thermodynamics and chemical equilibrium; ionic equilibria and electrochemistry. This course may be taken online by students who are not registered in a Bishop's Chemistry Program, subject to approval by the instructor. <i>Prerequisites: CHE191, CHE192, MAT191, MAT192, PHY191, and PHY192 or Collegial Chemistry NYA and NYB, Math NYA and NYB, and Physics NYA and NYB.</i> <i>Co-requisite: CHE 183b.</i> <i>Professor Scarlete</i>			Study of chromatography and quantitative analysis by chromatographic methods (TLC, GLC, HPLC, and gel permeation). <i>Prerequisites: CHE104.</i> <i>Professor Wood</i>		
Chemistry 183a	Physical Chemistry Laboratory I	1-0-4	Chemistry 131	Liberal Arts Chemistry: The Chemistry of Everyday Life	3-3-0
A series of experiments in Physical Chemistry to complement Chemistry 103b which must be taken concurrently by full-time Bishop's students. <i>Co-requisite: CHE103</i> <i>Professor Scarlete</i>			This course will discuss the chemistry underlying some everyday, or easily recognizable, products, processes, and policies. These may include: the chemistry of pollution, warfare, polymers and plastics, household products, and food. <i>This course cannot be taken for credit by students who have received credit for CHE191 or the collegial equivalent course, Chemistry NYA, or equivalent credit elsewhere.</i> <i>Course registration requires the instructor's permission.</i> <i>TBA</i>		
Chemistry 104a	Analytical Chemistry	3-3-0	Chemistry 132	Chemistry of Art Conservation and Restoration	3-3-0
Data handling, stoichiometric calculations, gravimetric analysis, acid-base equilibria and titrations, redox equilibria and titrations, complexometric titrations, precipitation reactions and titrations, electrochemical cells and electrode potentials. <i>Prerequisites: CHE191 and CHE192 or Collegial Chemistry NYA and NYB.</i> <i>Co-requisite: CHE184.</i> <i>Professor Wood</i>			This course is designed to introduce Fine Arts students to some of the scientific aspects affecting art works, collections and archives. Lectures will include a general survey of the properties, structure, decomposition and deterioration of organic and inorganic materials, the chemistry of pigments, scientific methods for the art conservator, and instrumental methods of analysis. <i>This course cannot be taken for science credit by students enrolled in programs Biochemistry, Biology or Chemistry.</i> <i>Not offered in 2009/2010</i>		
Chemistry 184a	Analytical Chemistry Laboratory	1-0-4			
Quantitative analysis of unknown samples by volumetric, gravimetric, and spectrometric methods will be carried out. <i>Co-requisite: CHE104.</i> <i>Professor Wood</i>					
Chemistry 105a	Organic Chemistry I: Introductory	3-3-0			
An introductory structural survey of the most commonly encountered organic functional groups that are present in carbon compounds, emphasizing their significance in biologically important molecules (lipids, carbohydrates, amino acids, proteins, steroids, and other types of natural products). Stereochemistry and the fundamental principles behind essential organic reaction mechanisms will be stressed throughout. Some basic definitions and nomenclature will be introduced. <i>Prerequisites: CHE191 and CHE192 or Collegial Chemistry NYA and NYB.</i> <i>Co-requisite: CHE 185.</i> <i>Professor Yeats</i>					

Chemistry 135 Beer 101 _ The Science of Brewing 3-3-0

Beer is among the world's most popular beverages and the industry continues to grow at both the megabrewery and microbrewery levels. This course is a general interest course on the nature of beer from a historical, sociological, and scientific perspective. The diverse nature of beer will be explored, as well as how the beverage has developed from its origins many thousands of years ago to what it has become today. Of particular emphasis will be the development of a general understanding of the brewing process, and the science and engineering involved. Various examples of beer's impact on society and culture will also be discussed.

This course cannot be taken for science credit.

Dr. Wood

Chemistry 144b Environmental Chemistry I: Atmosphere and Energy 3-3-0

This course explores the chemistry of the Earth's atmosphere and energy sources, both natural and anthropogenic. Topics covered in the section on the atmosphere include the chemical composition of the atmosphere and solar influence, stratospheric chemistry and ozone, tropospheric chemistry focusing on smog formation and acid precipitation, atmospheric aerosols, urban and indoor atmospheres, and global warming and climate change. Topics covered in the section on energy include solar energy, fossil fuels and the oil industry, nuclear energy, and the hydrogen economy.

This course is currently only offered in odd-numbered years.

Pre-requisites: CHE103, CHE104, CHE105.

Professor Wood

Chemistry 221a Transition Metals and Bioinorganic Chemistry 3-3-0

This course introduces students to the chemistry of the transition metals and their role in biochemical systems. The first half of the course focuses on the chemistry of the transition metals and their complexes, covering topics including oxidation states, coordination, crystal and ligand field theory, and inorganic reaction mechanisms. The second half of the course focuses on bioinorganic chemistry, covering topics including oxygen transport and storage, metalloenzymes, cytochromes and bioinorganic redox chemistry, cobalamins, photosynthesis, and nitrogen fixation.

This course is currently only offered in odd-numbered years.

Pre-requisites: CHE102, CHE103.

Co-requisite: CHE281a

Professor Wood

Chemistry 281a Transition Metals Lab 1-0-4

This laboratory course focuses on the synthesis of transition metal complexes and bioinorganic model compounds as practical examples of the material covered in CHE221.

This course is currently only offered in odd-numbered years.

Co-requisite: CHE221.

Professor Wood

Chemistry 222a Elements and Minerals 3-3-0

This course is an extensive survey of the chemistry of the s- and p-blocks of the periodic table with particular focus on the Environmental (eg. Nitrates and phosphates) and Geochemical (eg. Minerals, allotropes) properties of the elements.

This course is currently only offered in even-numbered years.

Pre-requisite: CHE102, CHE103.

Co-requisite: CHE282.

Professor Wood

Chemistry 282a Elements and Minerals Lab 1-0-4

This laboratory course focuses on the synthesis of compounds of the s- and p-blocks.

This course is currently only offered in even-numbered years.

Co-requisites: CHE222.

Professor Wood

Chemistry 223b Physical Chemistry II 3-3-0

Chemical thermodynamics; Zeroth Law and equations of state; First Law and thermochemistry; the Second Law and chemical equilibrium; the Third Law and introduction to statistical thermodynamics; thermodynamic databases; phase equilibrium; calculation of chemical equilibrium in complex systems. Maple-assisted calculus and computations in physical chemistry. This course may be taken online, pending instructor approval.

This course is currently only offered in odd-numbered years.

Pre-requisite: CHE103.

Co-requisite: CHE283.

Professor Scarlete

Chemistry 283b Physical Chemistry Laboratory II 1-0-4

Experiments related to the topics of Chemistry 223a which must be taken concurrently by full-time Bishop's students.

This course is currently only offered in odd-numbered years.

Co-requisites: CHE223.

Professor Scarlete

Chemistry 224a Physical Chemistry III 3-3-0

Maple-assisted computational statistical mechanics and kinetic theory of gases; gas reactions, chemical dynamics. Quantum chemistry, and spectroscopy; atomic structure, atomic orbitals, and atomic spectra (AAS, XPS, ESCA, EDX,...); introduction to molecular orbitals: LCAO, hybridization. Molecular electronic structure and molecular spectroscopy (physical principles of IR/Raman, rotovibrational spectra, ESCA, EPR and NMR spectroscopies).

This course is currently only offered in even-numbered years.

Pre-requisites: CHE103, CHE106, CHE223.

Co-requisite: CHE 284 for all Chemistry students and for all biochemistry students planning to do honours research projects in the area of physical chemistry.

Professor Scarlete

Chemistry 284a Physical Chemistry Laboratory III 1-0-4

Experiments related to topics of CHE 224b, which must be taken concurrently by chemistry students and by biochemistry students who are planning to do honours research projects in the area of physical chemistry.

Co-requisite: Chemistry 224.

Professor Scarlete

Chemistry 225 Organic Chemistry III 3-3-0

A more advanced discussion of organic reaction mechanisms; stereochemistry and conformational analysis; molecular rearrangements; pericyclic reactions; oxidations; tautomerism.

Pre-requisite: CHE105 and CHE106.

Co-requisite: CHE385.

Professor Yeats

Chemistry 385 Organic Chemistry Laboratory III 1-0-4

Laboratory and spectroscopic techniques used in the synthesis, separation, and purification of simple organic compounds.

Co-requisite: CHE225.

Professor Yeats

Chemistry 226 Organic Chemistry IV 3-3-0

The importance of electrophiles, nucleophiles, leaving groups, eliminations and dehydrations in the chemistry and reaction mechanisms of organosilicon, carbonyl, and biologically-important compounds.

Pre-requisite: CHE225.

Professor Yeats

Chemistry 386 Organic Chemistry Laboratory IV 1-0-4

More advanced laboratory techniques as applied to multistep syntheses and natural product isolation.

Pre-requisite: CHE385.

Professor Yeats

Chemistry 227a Principles and Practices of Chemical Spectroscopy and Mass Spectrometry 3-3-0

Theory and applications of multinuclear magnetic resonance, UV/VIS, EPR and electron spectroscopies for chemical analysis. Mass spectrometry and hyphenated methods. Use of chemical spectroscopy and mass spectrometry for the identification of organic compounds. 2D- and imaging techniques, including MRI. This course may be taken online.

Pre-requisites: CHE103, CHE104, and CHE106.

Co-requisite: CHE 287.

Professor Scarlete

Chemistry 287a Principles and Practices of Chemical Spectroscopy and Mass Spectrometry Laboratory 1-0-4

Experiments related to topics of CHE 227a, which must be taken concurrently by chemistry and biochemistry students.

Co-requisite: CHE227.

Professor Scarlete

Chemistry 234a Nuclear Chemistry 3-3-0

The principles and chemical applications of nuclear phenomena including nuclear properties, radioactive decay, and nuclear reactions.

Prerequisites: CHE102 and CHE103.

Professor Wood

Not offered in 2009/2010

Chemistry 235 Scientific Visualization in Chemistry 3-3-0

This course provides an introduction to the use of symbolic computational engines such as Maple for developing multimedia interactive computer animations of scientific concepts as a replacement for the classroom use of traditional two-dimensional media. The course, which provides a valuable introduction for both chemical educators and multimedia designers of Web-based learning and training applications at all levels, will concentrate upon developing precise interactive 2D and 3D computer representations of simple chemical concepts, kinetics, reactions, and mechanisms. Other interactive computer applications include the representation of molecular vibration, the design of molecules of pharmacological importance, and the virtual representation of molecular symmetry.

Pre-requisites: MAT 191, 192, CHE 191, 192, PHY 191, 192

Professor Scarlete

Not offered in 2009/2010

Chemistry 238b Petroleum Chemistry 3-3-0

After a brief introduction to the genesis of crude oil, the petroleum and petrochemical refineries, the course discusses in detail the primary organic products of the petrochemical industry as well as its secondary products, including polymers. Environmental problems associated with the industry and alternate energy sources will also be discussed.

Prerequisites: CHE105 and CHE106.

Not offered in 2009-2010

Chemistry 244b Environmental Chemistry II: Water and Soil 3-3-0

This course explores the chemistry of the hydrosphere and the terrestrial environment. Topics covered in the section on the hydrosphere include distribution of species in aquatic systems, gases in water, organic matter in water, metals and semi-metals in the hydrosphere, chemistry of colloids and surfaces, microbiological processes focusing on the carbon, nitrogen, and sulfur cycles, and wastewater treatment. Topics covered in the section on the terrestrial environment include physical and chemical properties of soil, and the chemistry of solid wastes.

This course is currently only offered in even-numbered years.

Pre-requisites: CHE 106, CHE 144, CHE 227

Co-requisite: CHE 248

Professor Wood

Chemistry 248b Environmental Chemistry Laboratory 1-0-4

This laboratory is a survey of the analytical techniques and sample preparation methods related to environmental chemistry. The labs will cover the determination of chloride ion in natural waters, determination of hardness in natural waters, determination of iron and manganese in natural waters by spectrophotometry and colorimetry, determination of trace metals by atomic absorption spectrometry, spectrophotometric determination of the chemical oxygen demand of natural and wastewaters, pattern recognition of petroleum products using gas chromatography, properties of detergents, determination of carbon dioxide in the atmosphere, and the collection and chemistry of acid rain. Wherever possible, students will be performing their analyses on real environmental samples.

This course is currently only offered in even-numbered years.

Co-requisite: CHE 244

Chemistry 263 Introductory Thermodynamics for Pharmacology - online 3-3-0

This course is part of the online Physical Chemistry program, as presented on the CHEMLOG-server, a certified Physical Chemistry resource for more than 100 Universities worldwide since 1998. The course-content has been built to meet the requirements of the Pharmacology program offered by the University of Waterloo, Ontario, and has been designed in conformity with Québec regulations (CREPUQ Subcommittee for Information Technology and Communication) and the pan-canadian accreditation system for the transfer of credits for online higher education. This course does not require registration in the CHE 283 laboratory course. Contact with students is entirely online, on VOD protocol, and the submission of assignments and exams is mediated via RAC-Webfile pass-worded login.

The course introduces the thermodynamic principles via an intuitive, phenomenological approach. The sets for molar heat capacities functions, van der Waals constants for real gases, mechanical constants of materials, and equilibrium constants, are all select-

ed from existent, thermodynamic databases accessible online. Via extended utilization of symbolic computation engines, the student can follow the consequences of the application of thermodynamic principles to real situations. The relationship between the changes in functions of state, U, H, S, F, and G, via modification of parameters of state like P, V, and T, is explained in detail for closed systems, and the effect of chemical reactions is explained in terms of the analysis of open systems. Practical examples cover accurate determination of functions of state, calculation of equilibrium constants of equilibrium concentrations in homogeneous systems including solutions, and gas phase reactions. Heterogeneous systems are introduced via the phase-rule, and calculated via the introduction of the appropriate thermodynamic functions of state in the Clausius-Clapeyron equation. The predictions of the phase diagrams simulated via symbolic computation are compared with the experimental phase diagrams from databases such as NIST, TDT, ICT, etc.

Prerequisite: a first course in Physical Chemistry or consent of the instructor.

Notes: Students registered in Chemistry programs at Bishop's may not receive credit for both this course and for CHE223.

Professor Scarlete

Chemistry 256f Intermediate Organic Chemistry 6-3-0

A more advanced discussion of organic reactions; condensation reactions; rearrangement reactions; organic synthesis; pericyclic reactions; introduction to heterocyclic chemistry. Includes one tutorial hour in alternate weeks.

Students may elect to take CHE256f in lieu of CHE225a and CHE226b. Students receiving credit for CHE256 may not also receive credit for CHE225 and CHE226.

Pre-requisites: CHE105 and CHE106

Co-requisite: CHE 385 and CHE386.

Professor Yeats

Chemistry 277f Scientific Writing and Chemical Literature for Major Students 3-0-0

This course introduces the Chemistry Major student to chemical information retrieval and requires two major term papers – one in the Fall semester, one in the Winter semester – each presented also in two short oral presentations. Students will use SciFinder/Chemical Abstracts to perform searching in structure/substructure, reaction, and bibliographic databases. The literature searching will be used in preparing the two term papers, chosen from a list of topics approved by the Chemistry Department, under the direction of a different member of faculty for each.

Chemistry Major students must enrol in CHE 277 as part of their degree program and may only take this course in their final year. Students receiving credit for CHE277 cannot also receive credit for CHE477.

Staff

Chemistry 461b Advanced Inorganic Chemistry 3-3-0

Selected topics in inorganic chemistry covering all aspects of inorganic chemistry from the alkali metals to the noble gases.

Pre-requisites: CHE221 and CHE222.

Professor Wood

Chemistry 464b Computational Chemistry and Molecular Modelling 3-3-0

Maple-assisted calculations of molecular orbitals and molecular modelling subroutines; from H₂⁺ molecular ion, via [Ni(En)₃]²⁺ and cis-platin (cancer chemotherapy), to cholesterol and cyclosporin; symmetry and point group analysis of molecular vibration; hybridization and Simple-Huckel Molecular Orbital calculations. Semi-empirical and ab initio methods; calculation of reaction and activation energies via modern alternatives to the Hartree-Fock self-consistent field method; density functional. Combinatorial processing parent-compound libraries and Spartan-assisted CSDB.

This course may be taken online (conditions apply, including instructor's permission and level of enrollment)

Pre-requisites: CHE223 and CHE224.

Professor Scarlete

Chemistry 470a Independent Study 3-0-0**Chemistry 471b Independent Study 3-0-0****Chemistry 477f Scientific Writing and Chemical Literature for Honours Students 3-0-0**

This course introduces the Chemistry Honours student to chemical information retrieval and requires two major term papers – one in the Fall semester, one in the Winter semester – each presented also in two short oral presentations. Students will use SciFinder/Chemical Abstracts to perform searching in structure/substructure, reaction, and bibliographic databases. The literature searching will be used in preparing the two term papers, chosen from a list of topics approved by the Chemistry Department, under the

direction of a different member of faculty for each.

Honours Chemistry students must enrol in CHE477 as part of their degree program and may only take this course in their final year. Students receiving credit for CHE477 cannot also receive credit for CHE277.

Staff

Chemistry 489f Honours Chemistry Research Project 6-0-12

Under the guidance of a faculty member, the student does an experimental research project requiring approximately 12 hours per week in both the Fall and Winter semesters, and presents the results of the project in a seminar and a written dissertation. The project chosen must be approved in advance by the Department, and may be in any field of chemistry plus material science.

Prerequisites: U3 Honours Chemistry registration or permission of the Department.

Staff

Chemistry 490ab Instrumentation and Process Control & Simulation 6-6-0

This 6-credit course is offered only to students who are eligible for admission into a final-year Chemical Engineering program. The course covers the basic principles behind chemical process control and instrument performance of sensors and controllers for optimization of chemical yield, reaction time, and product purity in industrial processes, and will include the use of instruments to control the bibliographic extent in combinatorial processes. Application of mathematical modelling methods, using Maple, for simulating the optimization of chemical process and combinatorial process design, will emphasize PID temperature control under various conditions of fluid flow.

Prerequisite: permission of instructor

Professor Scarlete

Chemistry 531ab Advanced Chemistry of the p-block Elements 3-0-0

This course focuses on the more recent chemistry of the elements of Groups 13 to 18. Particular topics covered will include p-block radicals, sulfur-nitrogen containing compounds, compounds of the noble gases, and new compounds of the pnictogens, chalcogens, and halogens.

Chemistry 532ab Chemistry of the Transition Elements 3-0-0

This course will offer a survey of the recent chemistry of the transition metal elements with focus on their synthesis and properties.

Chemistry 533ab Advanced Chemical Kinetics 3-0-0

This course focuses on complex reactions mechanisms, oscillating patterns, kinetic control of complex chemical systems, cross-dependent and diffusion limited chemical processes and statistical methods and theories for the determination of reaction rates.

Chemistry 534ab Computation Modules for Symmetry Analysis, Group Theory, and Point/Space Group Analysis of Molecular Vibrations 3-0-0

This course focuses on alpha (numeric) representations of character tables, point and space groups, and Maple-assisted matrix-definitions. Other topics include Matrix-representation of symmetry operators, numerical representation of character and correlation tables, site-symmetry, space groups, and factor-group analysis.

Chemistry 535ab Synthetic Methods in Organic Chemistry 3-0-0

This course provides an overview to the strategic design of synthetic routes for the preparation of complex target molecules. Techniques will include analysis of specific literature examples, including an overview of reactions, reagents, and stereochemical outcomes. Advanced synthetic techniques including advanced applications of enolate chemistry, metallaturic chemistry, oxidation/reduction methods, key ring forming reactions, and stereochemical control will also be covered.

Chemistry 536ab Topics in Mechanistic Organic Chemistry 3-0-0

A review of mechanistic organic chemistry with considerable emphasis on problem solving assignments involving addition reactions, aromatic substitution reactions, carbonyl chemistry, elimination and substitution reactions, oxidation and reduction reactions, molecular rearrangement, and orbital symmetry.

Chemistry 538ab Synthesis and Properties of Tetrahedral Semiconductors 3-0-0

This course focuses on the synthesis and properties of single crystals of Si, SiGe, SiC, and AlIBV compounds. The course covers Czochralski (Cz) and Floating zone (Fz) growth of bulk single crystals, an epitaxial growth of AlIBV thin films. The properties of these semiconductors are studied in detail in correlation with the synthesis method and with chemical and structural impurities. Effects of O, C, and N in the Cz-grown single crystals are extensively studied.

Chemistry 540f Graduate Seminar I 9-0-0

Students are required to participate in the departmental seminar series and to make a presentation on either their own work or on a research-related topic. Students are normally expected to enroll in this course at the beginning of their first year of studies. Students must successfully complete both CHE 540 and CHE 541 to qualify for the M.Sc. in Chemistry.

Chemistry 541f Graduate Seminar II 9-0-0

Students in the second year of their M.Sc. degree program are required to participate in the departmental seminar series and to make a presentation on either their own work or a research-related topic. Students must successfully complete both CHE 540 and CHE 541 to qualify for the M.Sc. in Chemistry.

Chemistry 600 Chemistry Thesis Research Dissertation 1 5-0-0

All students enrolled in the M.Sc. degree program in Chemistry are required to carry out independent, original research which must be presented in the form of a thesis. The research is conducted under the supervision of a Department of Chemistry faculty member. The thesis will be evaluated by all members of the Department of Chemistry and by one external referee with expertise in the student's field of study. The thesis must be successfully defended in an open forum to qualify for the M.Sc. in Chemistry.

Computer Science

Computer science is a subject related to almost every area of study known to modern man, the arts (computer-generated art, verification of historical documents, syntax study of languages including translation, etc.), social sciences (correlating experimental data, simulation, artificial intelligence studies), natural sciences (has always had application in this area), business and government (the largest single groups of users), education (computer-aided instruction, artificial intelligence), medicine, etc.

The department offers a wide selection of programs, ranging from broad to specialized:

- 1) Master's Degree Program
- 2) Undergraduate B.Sc. Degree Programs:
 - B.Sc, Honours in Computer Science
 - B.Sc, Major in Computer Science
 - B.Sc, Major in Computer Science with a Concentration in Imaging and Digital Media
 - B.Sc, Major in Computer Science with a Concentration in BioInformatics
- 3) Minor in Computer Science
- 4) A multidisciplinary Bachelor of Arts with a Major in Information Technology (details to be found in the Multidisciplinary Programs section at the end of the calendar)
- 5) Certificate Programs
 - Certificate in Computer Science
 - Certificate in Software Technology

MASTER'S DEGREE PROGRAM

Entrance Requirements

The minimum requirements for admittance to the Master's program are an undergraduate degree with a major in Computing Science or equivalent, and a high upper-second class standing.

Candidates with high academic standing in an undergraduate degree other than computer science, who have some computer science background either academic or professional, may be admitted as graduate preparatory students. Preparatory students will be asked to complete up to one year of undergraduate courses to enhance their background.

In addition to academic performance, a combination of factors is taken into consideration in assessing the eligibility of a candidate for admission into graduate programs.

One important such factor is the availability of a faculty member competent and willing to supervise the academic program of studies and research of the candidate; a candidate will not be admitted to the program under any circumstance unless such a faculty member exists.

Other factors include the performance of the candidate and the assessment provided by his/her referees as a measure of the likelihood that the candidate can successfully complete the course of studies and research.

Program Requirements

Graduate students should familiarize themselves with the University and divisional calendar and regulations. Some of the information herein is adapted from these regulations, but is not intended as a replacement.

Completing the degree normally requires four one-term 500-level courses, registration and participation in the Graduate Seminar (CSC 597 and CSC 598), together with a Master's thesis (CSC 599). Courses are chosen by students in consultation with their supervisor. All courses prescribed for a student's approved program of study are designated as primary. Courses additional to the student's approved program are designated as secondary. Failure to attain a minimum of 65% in any of the primary courses may result in the student being required to withdraw from the program.

Under certain circumstances, it is permissible for a student admitted to the program to follow an approved graduate-level credit course at another university. All interested students should consult their supervisor and the chair of their department prior to registration in order to obtain further information on procedures and conditions of eligibility.

A thesis proposal should be completed as soon as possible and by the end of the second term in the program at the latest. Students are expected to present their proposal in the Graduate Seminar course and also expected to give more detailed seminars describing their work later.

Thesis topics are chosen after discussion with potential supervisors. The amount of flexibility allowed in pursuing a particular topic will vary according to the supervisor's needs and interests. Theses are defended before an examining committee consisting of two members of the department, and an external examiner.

Any candidate (full-time or part-time), after initial registration in a thesis must maintain this registration in all successive terms (including the term in which the student is examined) until his/her thesis is completed. Completion means submission of a final grade to the Division after modifications, any retyping involved, etc. Students should note that faculty approval to register in the thesis is given on the understanding that the student will be in regular contact with his/her supervisor, and that thesis research will be actively pursued in each term of registration.

Preparatory Students

Candidates who do not satisfy the admission requirements may be admitted to a qualifying program. If successful in this qualifying period and upon formal application to the Division, the student may eventually proceed to the Master's program. However, admission to the qualifying program does not imply automatic admission to the

Master's program; at the end of the qualifying period the student will be required to apply for entry into the Master's program, at which time the department will determine the student's eligibility. If successful, the student will be informed of this decision by the Dean of the Division.

Credits taken to fulfill the requirements of the qualifying program may not be used for credit for the Master's degree. Courses taken extra to the program requirements of the qualifying year and which have been successfully completed may be considered for credit towards the Master's degree.

Graduate Courses

Master's students may take any four graduate courses as long as these are approved by their supervisor. Graduate students in the department may include in their programs relevant courses from other departments within the Division.

The department currently offers the following courses. The actual courses offered each term will be determined by student demand and the availability of faculty.

Computer Science 502 Digital Topology & Mathematical Morphology 3-3-0

Digital topology deals with topological properties of digital images. Its concepts and results are used to specify and justify some important image processing algorithms, including algorithms for thinning, boundary extraction, object counting, and contour-filling. Mathematical Morphology is a set-theoretic method of image analysis allowing to extract image components that are useful for representation and description. It can provide boundaries of objects, their skeletons, and their convex hulls. It is also useful for many pre-and post-processing techniques, especially in edge thinning. The goal of this course is to provide a full exposure to these techniques, their mathematical backgrounds, and their different applications.

Computer Science 505 Automata Theory & Computational Complexity 3-3-0

Cross-listed with CSC405. The course will address finite-state machines, context-free languages and pushdown automata, computability. A systematic study of the known relations between the most important resource bounded complexity classes, reductions, separation results and translation techniques is also included. Students are expected to prepare a research paper during the course.

Computer Science 506ab Parallel Models and Algorithms 3-3-0

This course provides an introduction to the design and analysis of parallel algorithms and to the various models of parallel computation. The course will discuss parallel algorithms for problems such as: basic arithmetic, sorting, searching, selection, graph theory, matrix computations, combinatorial enumeration, optimization, computational geometry, and numerical analysis. Parallel computational models and their properties will be presented. Other typical topics include: complexity classes, and the parallel computation thesis.

Computer Science 509ab Pattern Recognition 3-3-0

This course addresses the statistical pattern classification theory and techniques. The material presented is concerned with discrimination and classification in the context of computer vision applications. The course topics include Bayesian decision theory, maximum likelihood estimation, nonparametric techniques, stochastic methods and unsupervised clustering.

Computer Science 510 Model-Based Testing of Reactive Systems 3-3-0

Testing is the primary hardware and software verification technique used by industry today. Usually, it is ad hoc, error prone, and very expensive. In recent years, however, many attempts have been made to develop more sophisticated, formal testing methods. The goal of this course is to provide an in-depth exposure of this emerging area. Students are expected to participate in the presentation of the lecture material and perform independent research.

Computer Science 512 Mathematical Models in Image Processing 3-3-0

Cross-listed with CSC412. Image processing is a rapidly growing field. As such, it requires and necessitates a number of mathematical models and domains to achieve efficient processing algorithms. Designing a successful processing technique invariably relies on having a successful model for images themselves. The mathematical techniques needed could range from Partial differential equations, Differential geometry, Morse theory, Topology, Algebraic topology, Wavelets, Statistical techniques, Cal-

culus of variations, Numerical methods, Graph theory, and Optimization. The objective of this course is to discuss in depth a number of selected mathematical topics (and their use in image processing) that are of interest to the students at the moment the course is given.

Computer Science 513 Image Analysis 3-3-0

Cross-listed with CSC413. Image analysis is concerned with the development of machine algorithms in order to mimic the biological organism's ability to see and understand images and videos. The course content includes: camera models and calibration, image enhancement, features extraction and representation, shape from shading, stereo and texture, optical flow, motion analysis, high level vision and case studies.

Computer Science 514 Computer Networks & Distributed Algorithms 3-3-0

Cross-listed with CSC 414. The course presents computer networks at a functional level, with strong emphasis on programming distributed applications over a network. Discussion will be based on open networking and application standards such as the TCP/IP protocol suite and the Portable Operating System Interface (POSIX). The concept of distributed algorithms together with the associated challenges and examples are then presented. Programming distributed applications (in C or C++) is an integral part of the course. Students are expected to work on a large, distributed, and practically meaningful application as part of the course.

Computer Science 515 Concurrent & Real-Time Systems 3-3-0

Concurrent systems are complicated; they consist of many components which may execute in parallel, and the complexity arises from the multitude of combinations in which they interact. Concurrency by its very nature introduces phenomena not present in sequential systems, such as deadlock and livelock. This course provides an introduction to an algebraic language (such as CSP) for specification, analysis, and verification of concurrent and real-time systems. It then goes on to present the use of such a language as a formal method for concurrency at different stages in the development process.

Computer Science 516 Volumetric Image Analysis & Visualization 3-3-0

Digital volumetric images are stacks of two dimensional image slices produced for instance by tomographic scanner. The goal of this course is to study the different techniques and algorithms for the analysis of volumetric images including a discussion about some sources of volumetric images, especially those occurring in medical imaging with different modalities (Radiology, Computed Tomography, Magnetic Resonance Imaging, Nuclear Medicine, Ultrasound, Positron Emission Tomography). The course will also address the different techniques used to display and visualize volumetric images including volume slicing, surface rendering, and volume rendering.

Computer Science 517 Database Software Design 3-3-0

Cross-listed with CSC 417. This course covers how one can implement a Database Management system. Major topics are Storage management, Query processing, and Transaction management. As a basic assumption, data will not all fit in main memory, so algorithms and data structures appropriate for effective disk storage and quick access must be used. For example, one may use index structures such as B-trees or hash tables. We cover parsing of queries and optimizing of query plans. Finally, we cover durability of transactions using logging, and concurrency control for isolation of transactions. Additional topics in distributed databases are also presented. Students are expected to prepare a research paper during the course, or pursue a larger applied project.

Computer Science 519 Special Topics in Computer Science 3-3-0

Cross-listed with CSC419. The course will present topics of current interest in Computer Science. The course content varies reflecting the interests of the faculty. Students are expected to participate in the presentation of the lecture material and engage in independent research.

Computer Science 596 Research Topics in Computer Science 3-3-0

This course provides an introduction to the primary and secondary sources of information in the computing science literature. Faculty discuss their own research objectives and present an overview of research issues in the major subject areas of Computer Science. Students are required to submit and present a paper on a topic that relates to their research.

Computer Science 597f Graduate Seminar 6-0-0

Students are expected to participate in the departmental seminars and give at a minimum two presentations (one outlining their thesis proposal, and another one about their thesis work). All Master's students are normally expected to enroll in this course in their first year in the program. Students will not receive credit for both this course and CSC 598 at the same time.

Computer Science 598f Graduate Seminar 6-0-0

Students are expected to participate in the departmental seminars and give at a minimum two presentations (one outlining their thesis proposal, and another one about their thesis work). All Master's students are normally expected to enroll in this course in their second year in the program. Students will not receive credit for both this course and CSC597 at the same time.

Computer Science 599 Master's Thesis 21-0-0

UNDERGRADUATE BSC DEGREE PROGRAMS

Entrance Requirements

To enter a Computer Science program, a student must normally have a Quebec collegial diploma (D.E.C.) in science, or the equivalent, including Differential Calculus, Integral Calculus (Calculus I and II), Mechanics and Electricity and Magnetism (Physics I and II). Students having these prerequisites can normally complete their undergraduate programs in three years. Students lacking the above Math and Physics courses will have to take their equivalent at Bishop's, in addition to their university requirements.

Students entering four-year degree programs (after completion of Ontario OSSD, grade 12 in other provinces or the US or equivalent) must register in their first year in the required collegial equivalent science courses: Mathematics 191 and 192; Physics 191, 192, 081 and 082; 6 credits of Humanities which includes 3 credits of English (ELA116 or other) and 3 credits in either English, History, Classical Studies, Philosophy, Religion, Liberal Arts.

Mature students are admitted to a 3-year program, in addition to the Math and Physics collegial courses (Math 191, 192, Phy 191, 081, 192, 082).

Students who possess another University degree recognized by the Quebec government, and who wish to obtain a B.Sc. in Computer Science, are normally admitted in a 30-credit-minimum program. However, they have to satisfy the program requirements: the Math and Physics prerequisites, 44 Computer Science credits, 12 Math credits and Phy 101.

All students in B.Sc. programs must complete the English Writing Proficiency requirement (EWP) before graduation. Three credits for the EWP requirement are added to the total credit requirement for each program below.

Program requirements:

Honours in Computer Science

A. Dissertation-based Honours

Total of 95 credits (plus the EWP):

at least 56 CSC credits:

44 required: CSC 101, CSC 111, CSC 116, CSC 121, CSC 204, CSC 211, CSC 217, CSC 275, CSC 303, CSC 309, CSC 405, CSC 499
15 electives must include at least 5 courses total and 9 credits from 300-level courses and above

15 MAT credits

12 required: MAT 105, MAT 106, MAT 107, MAT 108
3 elective

3 PHY credits PHY 101

18 free electives

B. Course-based Honours

The course-based stream does not require a dissertation (i.e. CSC407) but requires 3 more CSC courses. It is primarily designed for students wishing a specialization in Computer Science but are not interested in research and do not intend to pursue graduate studies

38 cr. CSC required CSC 101, CSC 111, CSC 116, CSC 121,
CSC 204, CSC 211, CSC 217, CSC 275,
CSC 303, CSC 309, CSC 405

24 cr. CSC electives must include at least 8 courses total, and 15
credits from 300-level courses

15 cr. MAT

12 required MAT 105, MAT 106, MAT 107, MAT 108
3 elective

3 cr. PHY PHY 101

15 cr. free electives

95 Total (plus EWP)

Honours in Computer Science, Concentration in Imaging and Digital Media - at least 117 credits total + EWP:

This program requires completing up to **30** credits at Université de Sherbrooke. This program will provide outstanding students with the possibility to participate in the cooperative program in place at Université de Sherbrooke.

This program includes a number of new courses in computer science and mathematics needed in Imaging and Digital Media. Students completing the requirements of this program will also qualify for a minor in Mathematics. With a judicious choice of electives, students can easily fulfill requirements for a major in Mathematics.

Stages: 3 (possibility of 4)

CSC credits:

at least 35 required CSC 101, CSC 111, CSC 116, CSC 121,
CSC 204, CSC 211, CSC 217, CSC 218,
CSC 303, CSC 309

2 courses from the following:

CSC 207, CSC 215, CSC 216, CSC 306,
CSC 310, CSC 405, CSC 414, CSC 471

Imaging credits:

28 required CSC 208, CSC 302, CSC 412, CSC 413,
IMN 117, IMN 317, IMN 459, IMN 467,
IMN 517

6 electives from the following:

IMN 538, IMN 637, IMN 638, IMN 659, IMN 697

MAT credits:

21 required MAT 105, MAT 106, MAT 107, MAT 108, MAT 213,
MAT 217, MAT 301

3 electives from the following:

MAT 109, MAT 115, MAT 210, MAT 211, MAT 214, MAT 215,
MAT 225

3 PHY credits: PHY 101

15 Free Options

NB: IMN (*Imagerie et Médias Numériques*) are imaging and digital

media courses available in French at Université de Sherbrooke.

Conditions and restrictions for Honours programs

- a student is initially admitted to the Major program
- After a minimum of 1 semester, a student with a grade of at least 80% in required courses may request entry to the Honours degree
- the dissertation stream and the Concentration in Imaging and Digital Media require, in addition, departmental permission.
- students must maintain an average of 80% in required courses to stay in the program

Major in Computer Science

There are three possible streams that may be followed to obtain a Computer Science Major. The first is a broad program that provides the traditional courses expected in a CSC major, and can easily be combined with any other Major. The second is specialized in Imaging and can only be enrolled into by approval of the department. The third is specialized in BioInformatics, and combines courses both from CSC as well as Biological Sciences.

1) Major in Computer Science — Total of 95 credits (plus EWP):

at least 47 CSC credits:

32 required: CSC 101, CSC 111, CSC 116, CSC 121,
CSC 204, CSC 211, CSC 217, CSC 303,
CSC 309

15 electives must include at least 5 courses total

12 MAT credits

6 required: MAT 105, MAT 108

6 elective

3 PHY credits PHY 101

33 free electives

2) Major in Computer Science, Concentration in BioInformatics – at least 95 credits + EWP

The following program is based on a 3-year format for students possessing a CEGEP DEC in Sciences. Students admitted into a 4-year program will have to take the following prerequisites and their associated labs, normally in their first year (U0): Bio 191, Che 191, 192, Mat 191, 192, Phy 191, 192, Ela 116 (or another English literature course), a Humanities elective course (chosen from 100-level offerings in Cla, Eng, His, Lib, Rel and Phi), and an additional free elective.

a) CSC/MAT/PHY courses (at least 29 credits):

23 credits required:

CSC 111, CSC 204, CSC 205, CSC 217,
CSC 327
MAT 105
PHY 101

6 credits taken from any of:

CSC 201 (or BIO 252), CSC 207, CSC 208, CSC 216,
CSC 310
MAT 108
BMS 325

b) BIO/BCH/CHE courses (36 credits plus associated labs):

30 credits required, plus associated lab credits:

BIO 110, BIO 115, BIO 116, BIO 118, BIO 212, BIO
314 (or BCH 341), BIO 360 / BCH 370,
BCH 211
CHE 105, CHE 106

6 credits taken from any of:

BIO257, BIO291, BIO367,
BCH336, BCH461

c) Bioinformatics (9 credits):

BCH 342

Stage in Bioinformatics (6 credits)

d) 21 credits of free electives**MINOR IN COMPUTER SCIENCE**

25 CSC credits

11 required: CSC 101, CSC 111, CSC204

15 electives (must include at least 5 courses total, and
must not include CSC 102)

General Notes/Restrictions:

1. Only one of CSC304, CSC307 or CSC499 may be taken for credit, unless with a special departmental authorization
2. Computer Science courses that are double-listed in Math cannot be counted toward fulfilling the Math electives required for the Computer Science Honours/Major.
3. Students are encouraged to take their free electives from outside the department.

B.A. PROGRAM, MAJOR IN INFORMATION TECHNOLOGY

Please see the details of the program in the Multidisciplinary Programs section at the end of the calendar.

CERTIFICATE PROGRAMS – at least 32 credits**Description and objectives:**

The Certificate Programs in Computer Science are designed for individuals who need to acquire a basic understanding of computers and programming and knowledge of the field in order to expand their area of interest and professional expertise. Topics include: Communications, Software Engineering, Graphics and Artificial Intelligence. This program will help students to take full advantage of the computer technology available in the workplace.

Prerequisites to programs:

Applicants insufficient Math background might be required to take an additional 3-credit Math course in their first semester (Math 190 or equivalent).

Program description**A) Certificate in Compute Science**

Required courses : 19 credits

CSC 101ab	Foundations of Computer Science	4-3-3
CSC 111ab	Programming Methodology	4-3-3
CSC 116ab	Low Level Programming Language	4-3-3
CSC 204ab	Data Structures	3-3-3
CSC 211ab	Computer Organization	4-3-0

Elective courses: at least 15 credits (5 courses) from any other Computer Science courses except CSC 102.

B) Certificate in Software Technology

Required courses: 17 credits

CSC 101ab	Foundations of Computer Science	4-3-3
CSC 111a	Programming Methodology	4-3-3
CSC 204ab	Data Structures	3-3-0
CSC 303a	Principles of Programming Languages 3-3-3	

and at least one of:

CSC 218a	C++ Programming	3-3-3
CSC 328ab	Object Oriented Software Construction	3-3-1
CSC 316ab	Special Topics in Software	3-3-0
CSC 319a	Special Topics in Computer Science	3-3-0

Elective courses: at least 15 credits (5 courses) from any other Computer Science course except CSC 102.

Undergraduate Courses**Computer Science 101ab Foundations of Computer Science 4-3-3**

An introduction to Computer Science and selected applications suitable for both majors and science non-majors who want a broad overview of the field. The course provides a layered introduction covering hardware, system software and applications packages. The course includes elementary programming. Topics include Algorithmic foundations of Computer Science; The hardware world: number systems, boolean logic, computer circuits, Von-Newmann architecture; System software: assembly language, operating systems, high level languages, language translation; Models of Computation; Applications and Social Issues

Note: Registration priority is given to Science and IT students. CSC students must take this course in their first year.

Computer Science 102ab Essentials of Computing on the PC for Non-Scientists 4-3-3

An introduction to the use of the personal computer as a tool by non-scientists. No prior knowledge of computers is assumed and a learning by doing approach is adopted wherever possible.

Survey of the basic hardware: I/O devices, secondary storage, communications. Systems Software: DOS and Windows fundamentals from the user perspective. Basic hands-on applications: Word Processing, Spreadsheets, Database Processing.

Information and Decision Support systems, Communications and connectivity: E-mail and the Internet, Internet Resources. Workplace issues, privacy and security.

Note: This course cannot be taken for credit by Science students or by students who have received credit for either BCS114 or CSC101. This course is not offered on a regular basis.

Computer Science 103 Interactive Web Page Design 4-3-3

In this course, students will learn the basics of HTML, the language describing web pages, and CSS, another web page language. By constructing fill-in forms and employing short sections of script, students will learn how to enable users of the Internet to interact with their web pages: sending data to be stored, and receiving customized responses. The course will include simple database operations. Extensive laboratory work will result in students creating their own set of personal web pages on a publicly accessible server. The course is open to anyone interested in the subject.

Computer Science 107ab Databases and Dynamic Web Design 4-3-3

In this course students will build dynamic websites using SQL and PHP, learn the web technology that powers a million e-commerce sites, and enables dynamic, interactive tools and applications. Many real-world websites, and especially e-commerce sites, are complex and need flexibility. As a result, the use of databases as a back-end for websites is increasingly popular. Queries in the SQL language allow a high degree of selectivity, as well as easy storage and retrieval of large image and media content objects. This course expands upon the techniques of web programming introduced in Computer Science 103, to teach the use of databases in web design. Applications are primarily drawn from the e-commerce area, but are not limited to this domain. Students will learn how to design and administer a database, set up mailing lists, build discussion forums, create a storefront, and even build a working shopping cart. This course emphasizes practical skills with hands-on-projects.

Prerequisite: Computer Science 103 or permission of the instructor.

Computer Science 111ab Programming Methodology 4-3-3

This course introduces algorithms, data structures and software engineering principles. The use of a high level language is the tool to develop these components. By the end of the course, a successful student should be 'fluent' in programming, and have a good base for data structures. The course provides the necessary programming skills needed for further studies in Computer Science. Java is used as the programming language.

Computer Science 113ab Digital Imaging for Photography 4-3-3

The students in this course will learn the basic concepts of digital imaging as applied to photography. They will explore the techniques of acquiring, manipulating and outputting digital photographic images using a variety of modern hardware and software equipment. This course will also discuss lighting, color representation, gray scale and color adjustments, image filtering and special effects creation. The course is organized around assignments and a final project where the students will apply the studied techniques to their own photographic processes.

Computer Science 116a Low Level Programming Language 4-3-3

The goal of this course is to understand how a computer works at a low level. Programming assignments will be primarily in an assembly language, with programming in C for comparison. Topics: binary and hexadecimal number systems, a representative processor architecture, addressing modes, procedure calls, parameter passing, the use of stacks, in particular for recursive procedure calls. Comparison of the reference processor with other processors.

Computer Science 121b Advanced Programming Techniques 4-3-0

The course is intended to be a sequel to introductory programming with emphasis placed on the architecture of software. It will go in depth into object-oriented techniques, reusability, data abstraction, class design, and implementation, design and structure of class libraries. Topics to be covered include: polymorphism, encapsulation, overloading, inheritance and delegation, types of inheritance (Inheritance for Extension, Specialization and Specification), composition, aggregation and design of collections. Static and dynamic types, downcasting, exception handling. The second half of the course will be devoted to software design patterns, with particular emphasis on the observer, iterator, visitor and selected creational patterns. Course work will involve significant programming projects. The teaching language will be Java.

Prerequisite: CSC 111

Computer Science 201 Computer Ethics 3-3-0

Ethics is a branch of philosophy. Computers introduce arguably unique ethical issues in the way their use affects society. Technically minded professionals often give little attention to ethical issues. This course explores the basis for ethical reasoning, and examines ethical issues such as invasion of privacy, mischief including viruses, piracy and liability of software. It also considers broader issues of impacts on the individual and society, control of the technology, and the question of the difference between human understanding and rule-based processing of data. Students will be expected to participate in class discussions and role-playing scenarios, and to write a term paper.

Computer Science 204b Data Structures 3-3-0

An advanced course designed to expose the student to the latest programming theory and software engineering principles. Topics covered include modularization, data encapsulation, information hiding, data abstraction, and other object oriented software construction techniques will be discussed. Parallel design of algorithms and data structures, analysis of algorithms (including "big O" notation and software verification methods.) Standard data structures such as stacks, queues, trees and graphs will be examined. Programming examples are done in Java.

Prerequisite: Computer Science 111

Computer Science 205ab Data Mining for Scientists 4-3-3

Data is now created faster than humans are able to understand it and use it. There may be patterns hiding within this data with potentially useful information. This course will teach students, including Biology and Biochemistry students as well as those from Computer Science, how to discover these patterns for the purpose of solving problems, gaining knowledge, and making predictions. Topics covered in this course include data preparation, clustering, classification, association rules for mining and linear regression. This course includes assignments and a final project where the students are required to perform mining on real datasets drawn from the biological and physical sciences.

Prerequisites: PHY 101 (or equivalent)

See Physics 274ab

Students may not take this course for credit if they have received credit for Physics 274.

Computer Science 206b Functional and Logic Programming 3-3-3

There is much more than imperative programming. This course introduces two other programming paradigms, functional and logic. Topics normally include: functional programming languages, such as Lisp and Haskell; higher order functions, lazy evaluation, abstract and recursive types, structural induction, symbolic expressions; logic programming languages, such as Prolog; operational interpretation of predicates and terms, proof search, unification, backtracking; typical applications.

Corequisite: Computer Science 204b

Computer Science 207b Using and Designing Data Bases 4-3-3

This course presents data modeling (Entity-Relationship model, UML, etc.), relational algebra, normalization, SQL language. Implementation of databases using the relational model is discussed. Object-oriented modeling and implementation is also introduced. Other topics include: Concurrency control, transaction processing, client-server systems, distributed databases, and web-based delivery of data.

Prerequisite: Computer Science 204

Note: Students may not take this course for credit if they received credit for either BCS 214 (Jan 98 and onward) or CSC 274 (prior to 2003).

Computer Science 208b Scientific Programming 3-3-3

Scientific Programming is a course for students who want to learn more about the computing that goes on behind computational science. Students will learn the basic mathematical tools and computational techniques including the design and analysis of algorithms for solving mathematical problems that arise in many fields, especially science and engineering. Emphasis is placed on both the actual implementation and on the numerical and algebraic methods. The programming projects assigned in this course will make substantial use of C and C++ for numerical computations and Maple for symbolic computations.

Prerequisite: CSC 204, Math 191, Math 192

Note: See Mat 279b and PHY 278b. Students may not take this course for credit if they have received credit for Mat 279 or Phy 278.

Computer Science 211a Computer Organization and Logic Design 4-3-3

This is a theoretical course on computer organization and architecture. Different computer components and how they function are studied in detail. By the end of the course, students should be able to build (in theory) a small computer without interface. Topics covered are: boolean algebra and gates, combinational circuits (decoders, multiplexers, PLAs), logic design (flip-flops, shift registers, counters, sequential circuits), the ALU, memory (RAM, ROM, secondary storage), I/O Devices and the control unit (hardwired, microprogrammed). For those interested students, a follow-up course, largely consisting of lab experiments, is CSC212b.

Prerequisite: Computer Science 111ab, Computer Science 116ab

Computer Science 212b Microcomputer Interfacing 4-2-4

This course and integrated laboratory introduces the techniques used to interface a microcomputer to the real world with a robot as the main interface. Students will complete projects of increasing difficulty as they build and program a robot to accomplish a given task and brief the class on their design and findings. Topics will include: interactive programming, analog and digital inputs, use of the bus and registers to control output signals, simple electronic sensors, multiplexing and decoding and practical problem solving.

Prerequisite: Computer Science 211a or equivalent programming and electronic knowledge.

Computer Science 214 Introduction to Networks 3-3-0

This course introduces and discusses the components and architectures of computer networks. Topics to be covered include: Resources Sharing (Network Interface Circuitry, Files Servers, Workstations, etc.), Network Protocols (TCP/IP, Apple Talk, Novell, etc.) and Network Infrastructure (Hubs, Routers, Gateways, Bridges, etc.).

Computer Science 215b Data Communications 3-3-0

This is a theoretical course on Data Communications. It covers the basic and physical aspects involved when data is transmitted from one point to another, such as analog vs. digital transmission, various forms of encoding analog and digital data into appropriate signals, error detection techniques, multiplexing, etc... As well as an introduction is given on networking techniques, differences between circuit and packet switching, routing techniques, and Local Area Networks. The course is of mathematical and physical nature.

Prerequisites: Computer Science 111ab, Computer Science 116a

Note: See PHY 265. Students may not take this course for credit if they have received credit for PHY 265.

Computer Science 216a Artificial Intelligence 3-3-3

A course aiming to introduce students to the basic concepts and techniques of Artificial Intelligence. Topics will include: Search strategies; knowledge representation; AI languages; Rule-based inference systems, expert systems; computer vision; planning and problem solving; natural language understanding.

Prerequisite: Computer Science 204, Computer Science 206b or Computer Science 303

Computer Science 217a Design and Analysis of Algorithms 3-3-0

This course is intended to make students familiar with most of the existing techniques for problem solving. It starts with an introduction to algorithms efficiency, solving recurrence relations and basic data structures. Then different techniques for algorithms design are discussed; the divide-and-conquer technique, the greedy technique and its applications to graph algorithms, dynamic programming, backtracking and branch and bound algorithms. With every technique presented, examples from different domains are studied and their algorithms analyzed. At the end, students are briefly introduced to the vast area of "difficult" problems, or NP-complete.

Prerequisite: Computer Science 204 and MAT 105

Note: see MAT 277. Students may not take this course for credit if they received credit for MAT 277.

Computer Science 218a Advanced C++ Programming 3-3-3

The C++ language has become an industry standard as an implementation language. The course aims at introducing the student to intermediate and advanced programming using C++, with particular emphasis on systems software and the use of the C++ object-oriented extensions in software engineering

C++ Programming basics (loops and decisions, arrays, structures, functions, pointers) Objects and Classes, Inheritance, Virtual functions, files and stream, I/O Structure and design of Class libraries, Standard Template Library, OOP Design basics.

Although no prior experience in C is required, it is assumed that the student is already fluent in some other programming language and in the programming of data structures.

Prerequisite: Computer Science 204

Computer Science 272b Electric Circuits and Electronics 3-3-3

Review of D.C. circuits, Kirchoff's laws, network theorems. Network analysis for A.C. circuits, phasors. Diode circuits and filters. The physical basis of semiconductor devices including semiconductor diodes, junction transistors, and field-effect transistors. The operation of transistor amplifiers, digital electronics and integrated circuits will also be covered.

Note: See Phy 212. Students may not take this course for credit if they have received credit for Physics 212.

Computer Science 275b Numerical Methods 3-3-0

Numerical techniques for problem solving in mathematics, computer Science and Physics. Error analysis, roots of equations, QR-algorithm, interpolation, Numerical approaches to differentiation, integration and solutions of differential equations.

Prerequisite: Computer Science 111ab, Mathematics 107 and 108.

Note: See Mat 225 and Phy 275. Students may not take this course for credit if they have received credit for Mathematics 225 or for Phy 275.

Computer Science 301a Simulation Techniques 3-3-3

Computer simulation is defined and put into the context of other simulation methods. Two main techniques are studied, one involving automated spreadsheets (financial modelling) and the other queuing theory. A term project involving the simulation of an actual system is part of the course.

Prerequisite: Computer Science 204, PHY 101 (or equivalent)

Note: Students may not take this course for credit if they received credit for BMS 343. This course will be offered in alternate years.

Computer Science 302a Computer Graphics 4-3-0

This is an introductory course to the principles of interactive raster graphics. Topics include an introduction to basic graphics concepts, scan conversion techniques, 2-D and 3-D modeling and transformations, viewing transformations, projections, rendering techniques, graphical software packages and graphics systems. Students will use

OpenGL graphics API to reinforce concepts and study fundamental computer graphics techniques. *Prerequisites: Computer Science 204b, MAT 108a*

Computer Science 303a Principles of Programming Languages 3-3-0

The objective of this course is to introduce, analyse and evaluate, on a comparative basis, the concepts on which programming languages and their implementations are based. Topics to be covered: definition of languages, syntax and semantics; Compilation techniques, top-down parsing, creating a parser; variables and binding, expressions, statements; data types; procedures scope, and run-time considerations; coroutines; implementation of block-structured languages; modularity and abstractions; concurrency exception handling and program correctness; functional programming object-oriented programming languages; logic programming and constraint languages.

The languages ML, Eiffel, Lisp, Scheme, Prolog, Haskell, 02, Java and Smalltalk will be used to illustrate the above concepts.

Prerequisites: Computer Science 204 and one other Programming Language course

Computer Science 304 Project 3-0-3

This course is normally taken by CSC students in their final year. The project must be approved in advance by the department. Students will be expected to submit a written report and to make a presentation.

Prerequisite: approval of the dept., 80% in CSC courses

Computer Science 306b Compilers and Interpreters 3-3-0

This course is intended as an introduction to the fundamentals of language translation and compiler construction. Topics will include language theory and syntax; grammars, finite state machines, non-deterministic push-down automata; a thorough treatment of parsing methods covering top-down, bottom-up and precedence parsers; Syntax directed translation; Run-time environments; optimization and error recovery; code generation. Students will be required to construct a working interpreter of a Pascal-like language.

Prerequisite: Computer Science 303a

This course will be offered on alternate years.

Computer Science 308 Project II 3-0-3

This course is normally taken in the final year of studies and may involve work on a theoretical topic or a practical implementation of a sizable software project. The topic must be approved in advance by the department. Students are expected to attend bi-weekly project meetings where they present and discuss their work. In addition, they will make a final presentation at the end of term and submit a report.

Prerequisite: approval of the dept. 80% in CSC courses.

Computer Science 309b Principles of Operating Systems 3-3-0

Basic concepts of computer hardware; program translation linking and loading; cooperating sequential processes; critical section problem, process synchronization primitives, parallel programming; introduction to multiprogramming; operating system nucleus; file systems; reliability and protection; system performance, measurement and evaluation. Memory Management. Paging and Virtual memory. Unix. Using and programming the Unix Shell, Unix implementation. Examination of the implementation of Unix clones Minix, Linux, Survey of state-of the-art operating systems. Distributed Systems, Communication and synchronization in distributed systems. Theoretical issues and implementation.

Prerequisites: Computer Science 204b

Computer Science 310b Software Engineering 3-3-3

Software is an engineered product that requires planning, analysis, design, implementation, testing and maintenance. This course is a presentation of the techniques used in each step of the software product process. Topics: software requirements analysis and specifications; software design process, object oriented design; testing, reliability and maintenance; automated design tools, programming environments. Students will be expected to work jointly on several large software projects.

Prerequisites: Computer Science 204b, Computer Science 303a

Computer Science 311 Advanced Computer Architecture 3-3-0

The focus in this course is on basic principles, current practice, and issues in computer architecture and organization. At the end of the course students will have gained an understanding of how a computing system is organized, as well as why it is organized this way. The relation between hardware and the software that runs on it is emphasized, leading to an intuitive understanding of how the behavior of applications influences computer organization and design. Topics covered typically include (but are not limited to): instruction set design, microprogrammed versus hardwired processors, pipelining and superscalar processors, memory organization (cache, primary, virtual), I/O and interrupts, multiprocessors. Comparative critical and quantitative analyses of various systems that currently exist are presented.

Prerequisites: CSC 211 or instructor's permission.

All special topics courses require CSC111 and CSC204 as a prerequisite and/or any other course as specified by the instructor.

Computer Science 315ab Special Topics in Communications 3-3-0

The course will present topics of current interest or research directions in Computer Communications Networking and network programming. The course content is expected to vary to reflect the current interests of students and faculty. It will be offered by arrangement with the department.

Computer Science 316ab Special Topics in Software 3-3-0

The course will present topics of current interest or research directions in Software Science. The course content is expected to vary to reflect the current interests of students and faculty. It will be offered by arrangement with the department.

Computer Science 317ab Special Topics in Computer Applications 3-3-0

The course will present topics of current interest or research directions in Computer Applications. The course content is expected to vary to reflect the current interests of students and faculty. It will be offered by arrangement with the department.

Computer Science 318b Topics in Computer Science 3-3-3

The course will present topics of current interest or research directions in Computer Science. The course content is expected to vary reflecting the interests of the students and the faculty. It will be offered by arrangement with the department.

Computer Science 320b Concurrent Programming 3-3-3

Introduction to the principles and practice of concurrent programming. A vital topic in the design and implementation of operating systems, distributed systems, and distributed data structures. In addition, with the advent of commercially available multi-processors, it is growing in practical significance as well. Topics to be covered: programming notation and logics for concurrent programming, concurrency and synchronization, specification and semantics of concurrent execution, safety and liveness properties, critical section problems, data parallel processes, semaphores, conditional critical regions, monitors, message passing: synchronous-asynchronous. Remote procedure call, rendezvous. Language Overviews: Turing Plus, Occam, Ada, SR, Linda.

Prerequisite: Computer Science 309b

This course will normally be offered in the summer as an extension course.

Computer Science 327b Special Topics in Algorithms 3-3-0

The course builds on the techniques covered in CSC 217 to present some specialized algorithms in several areas, including Bioinformatics, Computational Geometry, and Network Flow.

Computer Science 328b Object-oriented Software Construction 3-3-0

Introduction to Object Oriented concepts and their application in programming and design. Encapsulation, polymorphism, dynamic binding and inheritance. Overview of Programming (C++, Smalltalk, Eiffel, Java and Scoops) and their implementations. Object Oriented Design, UML and Software design patterns. A survey of related fields such as Object Oriented Databases and Concurrent OOPs. Practical programming assignments will be implemented in Java, Eiffel and/or C++.

Prerequisite: Computer Science 204b

Computer Science 400ab Independent Studies 3-0-0

Individual study and research under the guidance of an advisor and Department staff.

Prerequisite: Permission of the department

Computer Science 405 Theoretical Aspects of Computer Science 3-3-0

The course will include several of the following topics: Computational models, Computational complexity; Finite-state machines; Context-free languages; Pushdown automata; Turing machines; Undecidable problems.

Prerequisite: CSC 204, MAT 105

Note: See MAT 275. Students may not receive credit for this course if they have already received credit for MAT 275, nor can they receive credit for both CSC 305 and CSC 405.

Computer Science 412 Image Processing 3-3-0

This course will introduce the area of Image Processing and present classical tools and algorithms in the field including: image perception, image acquisition and display, histogram techniques, image restoration, image enhancement, primitive operations for image analysis, segmentation, image transforms, and pattern and object recognition. Some examples of industrial applications of image processing and some important developments in image processing research will be also addressed. No student shall receive credit for both this course and CSC 312.

Prerequisites: CSC204, MAT192, PHY101 (or equivalent)

Computer Science 413 Computer Vision 3-3-3

This course is concerned with the computer acquisition and analysis of image data. Computer vision is the construction of explicit, meaningful descriptions of a physical object from images. Emphasis will be placed on: camera models and calibration, image representation, pattern recognition concepts, filtering and enhancing, segmentation, texture, motion from image sequences, deformable models, matching, stereovision,

perceiving 3D from 2D images and tracking with dynamic models. The programming projects assigned in this course will make substantial use of the C and C++ programming languages. No student shall receive credit for both this course and CSC 313.

Prerequisites: CSC 204, CSC 218, MAT 192, PHY 101 (or equivalent)

Computer Science 414ab Computer Networks 4-3-3

This course elaborates on the material considered in CSC 215 (Data Communications). It presents computer networks at a functional level, with strong emphasis on programming distributed applications over a network. Discussion will be based on open networking and application standards such as the TCP/IP protocol suite and the Portable Operating System Interface (POSIX). Topics normally covered are TCP/IP architecture and programming, the client-server model, network file systems, streaming, tunnelling. Programming distributed applications (in C or C++) is an integral part of the course. No student shall receive credit for both this course and CSC 314.

Prerequisite: CSC 218 and CSC 215 or equivalent experience in computer networks.

Computer Science 417ab Database Software Design 3-3-0

This course covers how one can implement a Database Management system. Major topics are storage management, Query processing, and Transaction management. As a basic assumption, data will not all fit in main memory, so algorithms and data structures appropriate for effective disk storage and quick access must be used. For example, one may use index structures such as B-trees or hash tables. We cover parsing of queries and optimizing of query plans. Finally, we cover durability of transactions using logging, and concurrency control for isolation of transactions. Additional topics in distributed databases are also presented.

Computer Science 419ab Special Topics in Computer Science 3-3-0

The course will present topics of current interest or research directions in Computer Science. The course content is expected to vary from year to year to reflect the current interests of students and faculty. It will be offered by arrangement with the department. *No student shall receive credit for both this course and CSC 319*

Computer Science 471ab Graph Theory 3-3-0

An introduction to the combinatorial, algorithmic and algebraic aspects of graph theory.

Prerequisite: MAT105, CSC204

Note: See MAT321. Students may not take this course for credit if they have received credit for MAT321, nor can they receive credit for both this course and CSC371.

Computer Science 499 Honours Dissertation 6-0-0

The student is required to complete a theoretical or applied project. The subject is arranged with the student's supervisor during the first four weeks of term. A written dissertation is required as well as two seminar presentation.

Note: This course is open only to final year Computer Science Honour Students in the dissertation stream, and only by permission of the department.

Mathematics

Mathematics is the language of the sciences, a language which allows scientists to quantify, model, understand and predict behaviour in an enormously diverse range of phenomena of interest. Simultaneously, Mathematics is often regarded as an art, as it is the creative study of patterns and of problem solving. Mathematics covers a wide range of disciplines including, algebra, analysis, combinatorics and discrete mathematics, and differential equations. In first-year courses, mathematics students are joined by other science students, particularly from Physics and Computer Science. In the advanced courses, classes are very small, and some are given on an individual or tutorial basis.

The highest level of specialization is Honours, and Honours programs prepare students for direct entry into graduate work leading to a Master's or Ph.D. degree. All honours mathematics students have an opportunity to study independently and thus develop their reading and problem solving skills, and there is some chance to pursue special interests. The Majors programs provide students with an excellent general preparation for the career world, while not preventing entrance into graduate school (sometimes after a qualifying year). The Majors programs have sufficient electives to allow students to combine their major with a second major or at least a minor (the least specialized type of program) in another discipline. Students are

encouraged to add a minor or major and many do so. Popular choices include computer science, physics, music, English, French, Spanish, drama, and philosophy. The Department of Mathematics offers several specialized, interdisciplinary programs, jointly with other departments, including Economics, Hispanic Studies, the School of Education and the Williams School of Business.

Entrance Requirements

To enter a Mathematics program, a student will normally have completed either a Québec Collegial Diploma (DEC), or grade 12 in another Canadian province or the U.S.A., or the equivalent level of education internationally. Admitted students with a DEC will normally be registered in a three-year program of at least 94 credits, while students with a grade 12 diploma (or equivalent) will be registered in a four-year program of at least 124 course credits. A student's total credit requirement depends on the program and the type of degree chosen. However, all Bishop's students must complete the 3-credit, English Writing Proficiency (EWP) requirement which is included in the total credit requirement.

Students entering a Mathematics program at Bishop's from another Canadian University or College, or from accredited international post-secondary institutions, will have their transcripts of grades examined individually for possible transfer credit against a Bishop's program's requirements.

The Programs

The Department of Mathematics offers the following degree programs:

These courses are included in the 124 (or higher) total credit requirement. Students transferring into Mathematics programs may use credit for Mat 198 to replace Mat 191, and Mat 199 to replace Mat 192. Credit for Mat 193 with a grade of 80% or higher will also be accepted to replace Mat 191. Mathematical Contexts Minor program students normally complete Mat 198 and 199 (instead of Mat 191 and 192, although theses are acceptable), and do not need to do so in first year.

First-year Physics requirement

Mathematics students pursuing the Bachelor of Science (B.Sc.) degree require six course credits of introductory physics studies in first year. Students in the Bachelor of Arts (B.A.) degree program are exempt from this requirement. Students with any DEC are exempt from this requirement if they have completed two introductory Physics courses, Mechanics, and Electricity and Magnetism, at CEGEP. If one or both of these courses were not completed, they must be completed at Bishop's and the credits will be added to the total credit requirement. Students entering four-year B.Sc. programs in Mathematics with a grade 12 diploma (or equivalent) must register in Physics 191 and 192 in first year. These courses are included in the 124 (or higher) total credit requirement.

Humanities requirement

Students entering any four-year program in the Division of Natural Sciences and Mathematics, with a grade 12 diploma (or equivalent) from another Canadian province, the USA or elsewhere, must complete six course credits of humanities studies, normally in the first year at Bishop's. Students who have a Québec Collegial Diploma

Name of Program	Code	Levels of Specialization Available	Degree Types Available
Mathematics	MAT	Honours, Major or Minor	B.Sc. or B.A.
Mathematics Education	EDM	double Major with Education	B.Sc. or B.A.
Matemáticas en Español	n/a	Major in Mathematics combined with a Minor in Hispanic Studies	B.Sc. or B.A.
Applied Mathematics	n/a	double Concentration with Business or Economics	B.C.S.
Pure Mathematics	n/a	double Concentration with Business and Economics	B.C.S.
Mathematical Contexts	MAC	Minor	add to any

The requirements for Mathematics students differ depending on whether the degree being pursued is a B.Sc., a B.A. or a B.B.S., and whether the student entered Bishop's after completing CEGEP in Québec, or after completing grade 12 (or the equivalent) in another province or elsewhere. Two or more Mathematics programs may not be combined in any Bishop's degree.

First-year Calculus requirement

All Mathematics students require six course credits of Calculus studies, normally in first year. Students with any Québec collegial diploma (DEC) are exempt from this requirement if they have completed a course in Differential Calculus and a course in Integral Calculus at CEGEP. If one or both of these courses were not completed at CEGEP, they must be completed at Bishop's and the credits will be added to the total credit requirement. Students entering four-year programs in Mathematics with a grade 12 diploma (or equivalent) must register in Mathematics 191 and 192 in first year.

(DEC), students admitted as "Mature Students", and 2nd Bachelor's degree students are all exempt from this requirement. The Humanities requirement must include ELA 116 Effective Writing, or another English course (coded 'ENG'), and one additional course selected from Humanities courses in Classical Studies, English, History, Liberal Arts, Philosophy or Religion (courses coded CLA, ENG, HIS, LIB, PHI, or REL). These credits are included in the 124 (or higher) total credit requirement.

Computer Science requirement

All Mathematics majors and honours students (except those in the Mathematics Education double major program) are required to complete the course CSC 111 Programming Methodology.

Science Elective requirement

Mathematics students pursuing a Bachelor of Science degree must complete three courses (at least nine course credits) of science electives in their degree program. Students in any B.A. degree program are exempt from this requirement.

Mathematics Electives

Mathematics students (in any program) may not include courses from the list: Mat 190, 191, 192, 193, 195, 198, 199, as mathematics elective credits. Courses at the 400 level are only open to Honours students.

The courses Mathematics 190, 193, 195 are not accepted as credits for any Science or Mathematics degree. Mathematics 191, 192, 198, 199 are not accepted as credits in 90-credit Science programs. Mathematics courses 190, 191, 192, 193, 198, 199 may not be taken for credit by students who have already passed equivalent course(s) elsewhere. Students in Science programs, including Mathematics B.A., may receive a maximum of three credits in elementary statistics courses.

Matemáticas en Español

This is a unique program combining a Major in Mathematics, a Minor in Hispanic Studies as well as one year of Spanish immersion at the Universidad San Francisco de Quito in Ecuador. Contact the Chair of the department for more details.

Mathematics Education double Major; B.Sc., B.A.

These students will find their program course list and additional program requirements listed in the School of Education's section of this Calendar.

Mathematics (Applied or Pure) double Concentration; B.B.S.

These students will find the Bachelor of Commerce and Science program description, their program course lists and additional program requirements listed at the beginning of the Division of Natural Science and Mathematics' section of this Calendar.

Mathematics Honours; B.Sc., B.A.

Normally a student is admitted to an Honours program after completing a minimum of 12 credits in Mathematics courses with an average of at least 70% and having achieved an average of 65% in all courses taken at Bishop's.

To continue in an Honours program the student must obtain an average of at least 70% in Mathematics courses in each academic year.

In order to graduate with a Mathematics Honours degree, the student must have an overall average of 70% in all Mathematics courses.

Requirements:

MAT105, MAT106, MAT107, MAT108, MAT109, MAT115, CSC111, MAT210, MAT213, MAT214, MAT215, MAT217, MAT221, MAT222

6 optional credits of Mathematics courses at the 100 level or higher,
9 optional credits of Mathematics courses at the 200 level or higher,
6 optional credits of Mathematics courses at the 300 level or higher,
6 optional credits of Mathematics courses at the 400 level.

B.Sc. students must include at least 9 additional Science credits among their options.

Total credits:

B.Sc.: 66 Mathematics, 4 Computer Science,
9 Science options, 12 options.

B.A.: 66 Mathematics, 4 Computer Science,
21 options.

Recommended schedule:

	Fall	Winter
Year 0 <i>(for students in a four-year program or lacking some CEGEP requirements)</i>	MAT191 PHY191 (B.Sc. students) ELA116 elective (B.A. students) elective elective	MAT192 PHY192 (B.Sc. students) Humanities electives elective (B.A. students) elective elective
Year 1	MAT105 MAT106 MAT108 CSC111 elective	MAT115 MAT107 MAT109 elective elective
Year 2	MAT1xx MAT213 MAT221 MAT2xx elective	MAT1xx MAT214 MAT222 MAT2xx elective
Year 3	MAT215 MAT210 MAT3xx MAT4xx elective	MAT217 MAT2xx MAT3xx MAT4xx elective

This schedule is provided as a recommendation only. The order in which the courses are taken is subject to change. Students are encouraged to consult the Chair of the department before registering for their courses. The code MATnxx refers to any 3-credit MAT course at the n-hundred level or higher.

Mathematics Major; B.Sc., B.A.**Requirements:**

MAT105, MAT106, MAT107, MAT108, MAT109, CSC111

3 credits from the list {MAT115, MAT114 OR MAT125}, MAT210, MAT213, MAT214, MAT215, MAT221,

6 optional credits of Mathematics courses at the 100 level or higher,
9 optional credits of Mathematics courses at the 200 level or higher.

B.Sc. students must include at least 9 additional Science credits among their options.

Total credits:

B.Sc.: 48 Mathematics, 4 Computer Science,
9 Science options, 30 options.

B.A.: 48 Mathematics, 4 Computer Science,
39 options.

Recommended schedule:

	Fall	Winter
Year 0 (for students in a four-year program or lacking some CEGEP requirements)		
	MAT191	MAT192
	PHY191 (B.Sc. students)	PHY192 (B.Sc. students)
	ELA116	Humanities electives
	elective (B.A. students)	elective (B.A. students)
	elective	elective
	elective	elective
Year 1	MAT105 MAT106 MAT108 CSC111 elective	MAT{115 or 114 or 125} MAT107 MAT109 elective elective
Year 2	MAT1xx MAT213 MAT221 elective elective	MAT1xx MAT214 MAT2xx elective elective
Year 3	MAT215 MAT210 elective elective elective	MAT2xx MAT2xx elective elective elective

This schedule is provided as a recommendation only. The order in which the courses are taken is subject to change. Students are encouraged to consult the Chair of the department before registering for their course. The code MATnxx refers to any 3-credit MAT course at the n-hundred level or higher.

Mathematics Minor; B.Sc., B.A.

MAT 106a, 107b, 108a, 109b or 105b, plus 12 additional mathematics credits, not including MAT 191a or MAT 192b, including at least 6 credits at the 200 level or higher.

Minor in Mathematical Contexts; B.A.

The ancient, rich and universal endeavor which is mathematics, underlies all of science and engineering. Increasingly however, mathematical contexts are entwined in the fabric of modern humanistic studies.

The mathematics of social choice is enlightening the study of politics, sociology and anthropology. The modern mathematics of management science is essential not only in the world of Business and Economics, but also to the work of human geographers rely on mathematical modeling. Mathematical contexts reach even to the creative arts. Here, new geometries, elliptic, hyperbolic, and most recently, *fractal*, are providing fresh and exciting sources of pattern and inspiration, the raw materials of the visual artist.

Statistics are encountered daily in every media, while statistical analyses have invaded every facet of modern life. Indeed, if for no other reason, educated persons today must understand mathematical concepts for the critical evaluation of *data*. Such is required in order to avoid deception and bogus claims based on false or misleading

representations of statistics. Finally, the *information age* has given new context to an ancient mathematics: coding theory. From data encryption to internet security, mathematics is the context of modern human communication.

Many students of the Liberal Arts and Humanities, of Education and the Social Sciences, come to the discipline of Mathematics relatively late. Recently convinced of the necessity of broadening the mathematical context of their education, they nevertheless now face a *language* barrier. Not having pursued mastery of the high-school “advanced math” curriculum, or having gone “rusty” from lack of recent use, they now find the language of mathematics, that of *quantitative reasoning*, unfamiliar, foreign, and even intimidating.

It is for such students, that the Minor in Mathematical Contexts is intended. Here, mathematical concepts are developed and analytical thinking is employed, to systematically study patterns (raw materials of mathematics), discovered in diverse fields of study. The emphasis will be on mathematical context and thinking; not on techniques, computations, and prerequisite skills. An adult willingness to think deeply, and academic admission to Bishop’s University, are the only prerequisites. In no way should these courses be confused with the “remediation” courses of other institutions: rectifying shortcomings in algebraic skills is not the goal. Rather, developing analytical problem solving skills in mathematical contexts is the objective. Successful students will find, incidentally, that their Bishop’s B.A. degree has been significantly enhanced by this innovative program of study for citizens of the 21st century.

The minor in Mathematical Contexts can be added to any degree program and consists of the following courses:

- Mat 105 Discrete Mathematics
- Mat 108 Matrix Algebra
- Phy 101 Statistical Methods
- Mat 198* Calculus I (for Life Sciences) prereq: Precalculus
- Mat 199* Calculus II (for Life Sciences) prereq: Mat 198
- * (Remedial Precalculus and Algebra courses are available)

An additional 15 course lecture credits in Mathematics must be chosen from among:

- Mat 100 Excursions in Modern Mathematics*
- Mat 101 Further Excursions in Modern Mathematics**
- Mat 104 History of Mathematics
- Mat 109 Linear Algebra prereq: Mat 108
- Mat 114 Modern Geometry: Euclidean to Fractal
prereq: Mat 105
- Mat 115 Further Discrete Mathematics prereq: Mat 105
- Mat 125 Number Theory
- Mat 221 Introduction to Modern Algebra I
prereq: Mat 105, Mat 109
- Mat 222 Introduction to Modern Algebra II prereq: Mat 221

Notes: The two courses, PMA 160 and PMA 260 may replace Phy 101 in the required list of courses. A student may not graduate with a double minor in mathematics.

* The science version of this course, Mat 110 is also accepted.

** The science version of this course, Mat 111 is also accepted.

Mathematics 100a Excursions in Modern Mathematics 3-3-0

An introduction to modern applied mathematics: social choice, management science, growth, symmetry, and descriptive statistics. Not intended as a numeracy course, nor for the remediation of algebraic shortcomings: computational complexity is minimal, and math prerequisites are absent. Instead, the methodology of mathematics is addressed: the use of unambiguous language and simplification to model practical problems, the types of answers the discipline can provide, and the notions of generalization and "open" problems. The course will allow the student to develop a sense of the nature of mathematics as a discipline, and an appreciation of its role in the modern world.

Note: Science students must enroll in Mathematics 110 instead of this course. Students may only receive credit for one of MAT 100 or MAT 110.

Mathematics 101b Further Excursions in Mathematics 3-3-0

Further topics in modern applied mathematics. A continuation of the style and subjects in Mathematics 100, this course is also not intended to redress deficiencies in numeracy, nor does it have any mathematical prerequisites. Topics may include growth models, game theory, linear programming, fractal geometry, coding theory, non-Euclidean geometry and selected current readings.

Note: Science students must enroll in Mathematics 111b instead of this course. Students may only receive credit for one of MAT 101 and MAT 111.

Mathematics 104a History of Mathematics 3-3-0

This course is designed to help history, philosophy, and education students come to a deeper understanding of the mathematical side of culture by means of writing short essays. Mathematics majors acquire a philosophical and cultural understanding of their subject by means of doing actual mathematics problems from different eras. Topics may include perfect numbers, Diophantine equations, Euclidean construction and proofs, the circle area formula, the Pell equation, cubic equations, the four square theorem, quaternions, and Cantor's set theory. The philosophical themes of infinity and Platonism recur repeatedly throughout the course.

Mathematics 105a Introduction to Discrete Mathematics 3-3-0

Combinatorics. Propositional logic. Induction. Sets. Quantifiers. Recursion relations.

Mathematics 106a Advanced Calculus I 3-3-0

Sequences and series. Taylor series and polynomials. Power Series. Functions of 2 and 3 variables. Partial Derivatives, directional derivatives, differentials. Lagrange multipliers. Multiple integrals and applications.

Prerequisite: Mathematics 192b or a grade of at least 80% in Mathematics 199b.

Mathematics 107b Advanced Calculus II 3-3-0

Vector-valued functions, parametric curves, arclength, curvature. Change of Variables and Jacobians. Line integrals. Surface integrals. Green's theorem. Divergence theorem. Stoke's theorem. Differential operator.

Prerequisite: Mathematics 106a, Mathematics 108a

Mathematics 108a Matrix Algebra 3-3-0

Operations on matrices, transpose and inverse. Systems of linear equations. Determinants. Linear transformations. Eigenvalue and eigenvectors. Vector spaces. Bases and dimension. Rank and nullity. Applications.

Mathematics 109b Linear Algebra 3-3-0

Diagonalization. Inner product spaces. Gram-Schmidt process. Change of basis. Complex vector spaces. Systems of differential equations. Applications.

Prerequisite: Mathematics 108a

Mathematics 110a Excursions in Modern Mathematics 3-3-0

This is the same course as Mathematics 100 but it is intended that science students would enroll in this course and complete assignments that are more appropriate to their needs.

NOTE: Students may only receive credit for one of MAT 100 or MAT 110.

Mathematics 111b Further Excursions in Mathematics 3-3-0

This is the same course as Mathematics 101b but it is intended that science students would enroll in this course and complete assignments that are more appropriate to their needs.

Note: See Mathematics 101b. Students may only receive credit for one of MAT 101 and MAT 111.

Mathematics 114b Modern Geometry: Euclidean to Fractal 3-3-0

Particularly recommended for elementary and high-school teachers. Euclidean, elliptic and hyperbolic geometries, and applications: modern graphics, fractal images and the work of analytical artists like M.C. Escher.

This course must be taken concurrently with Mathematics 184b.

Prerequisite: Mat 105

Corequisite: Mat 184b

Mathematics 115b Further Discrete Mathematics 3-3-0

Relations: functions, equivalence relations, partially ordered sets. Zorn's lemma. The axiom of choice. Cardinality and counting. Graph theory. Solving recurrence relations.

Prerequisite: Mathematics 105a

Mathematics 125a Number Theory 3-3-0

A classical discipline, number theory has become the spectacularly successful language of modern cryptography and coding theory. This course is a gently introduction to the classical theory and modern applications. Topics may include: unique factorization and congruences, group of integers module n and its units, Fermat's little theorem, Fermat's last theorem, Euler's function, Wilson's theorem, Chinese remainder theorem, quadratic reciprocity, Gaussian integers.

Prerequisite: Mathematics 105

Mathematics 172a Mathematical Economics I 3-3-0

Application of matrix algebra and multivariate calculus to model-building and problem-solving in Economics

Prerequisites: Economics 102, 103

See EMA262A

Students may not take this course for credit if they have received credit for EMA262a.

Mathematics 177a Introduction to Mechanics 3-3-0

Statics: equilibrium of bodies subject to many forces. Kinematics; rectilinear, plane, circular and simple harmonic motion. Dynamics: conservation of mechanical energy and momentum; place and circular motion of particles; rotation of macroscopic bodies. Elasticity: elastic moduli. Hydrostatics and hydrodynamics.

Prerequisite: Physics 191a or equivalent

Corequisite: Mathematics 106a

See Physics 117a

Students may not take this course for credit if they have received credit for Physics 117a.

Mathematics 184b Modern Geometry by Laboratory Explorations 1-0-3

Geometry explorations using Geometer's Sketchpad software. Projects will enhance the learning of the curriculum of the course MAT 114 which must be taken concurrently.

Corequisite: Mat 114b

Mathematics 190ab Precalculus Mathematics 3-3-0

Review of algebra. Sets, Functions, graphs. Slope and equation of a straight line. Equation of a circle. Exponential and logarithm functions with applications. Arithmetic and geometric progressions. Permutations and Combinations.

Students who have received credit for an equivalent course taken elsewhere may not register for this course.

Mathematics 191a Enriched Calculus I 3-3-0

Elementary functions, limits, continuity. The derivative, differentiability, mean value theorem. Maxima and minima, Fermat's theorem, extreme value theorem, related rates, L'Hospital's rule. Applications. Riemann sums, definite integral. Emphasis is on an analytical understanding.

This course is for students who lack collegial Mathematics 103 or the equivalent.

This course is required for all students in Mathematics, Physics and Computer Science.

Students who have received credit for an equivalent course taken elsewhere may not register for this course.

Credit will be given for only one of Mathematics 191a, 193ab, and 198ab.

Mathematics 192b Enriched Calculus II 3-3-0

Area. The definite integral. The Fundamental Theorem of Calculus. Techniques of integration. Volumes, centers of mass, moments of inertia, arclength and other applications of integration. Mean value theorem for integrals. Emphasis is on analytical understanding.

Prerequisite: Mathematics 191a or a grade of at least 70% in Mathematics 198a or 80% in Mathematics 193ab.

This course is for students who lack Collegial Mathematics NYB or the equivalent.

This course is required for all students in Mathematics, Physics and Computer Science.

Students who have received credit for an equivalent course taken elsewhere may not register for this course.

Credit will be given for only one of Mathematics 191a, 193ab, and 198a.

Mathematics 193ab Calculus I (for Business and Economics students) 3-3-0
Functions. Limits and continuity. Slope of tangent line. Derivative of a function. Derivatives of polynomial, exponential and logarithmic functions. Rules for sums, products, quotients. Chain rule. Maxima and minima. Introduction to integration: antiderivatives and area.

Pre or Co-requisite: Mathematics 190a, CEGEP Math NYA or the equivalent

Credit will be given for only one of Mathematics 191a, 193ab and 198ab.

Students who have received credit for an equivalent course taken elsewhere may not register for this course.

Mathematics 195ab Calculus II (for Business and Economics Students) 3-3-0
Review and extension of differentiation and integration. Implicit differentiation. Integration by substitution and parts. Separable first order differential equations. Riemann sums. Applications to areas, finance, etc. Introduction to matrix algebra.

Prerequisite: Mathematics 193b or CEGEP Math NYA or the equivalent.

Credit will be given for only one of Mathematics 192b, 195ab and 199b.

Students who have received credit for an equivalent course taken elsewhere may not register for this course.

Mathematics 198a Calculus I (for Life Sciences) 3-3-0
Elementary functions, limits, tangent line approximations. The derivative, and differentiation rules. Continuous optimization in one variable. Applications to Biology, Chemistry, Medicine and Environmental Science. The emphasis is on conceptual understanding and computational competency.

This course is intended for students who lack collegial Mathematics NYA or the equivalent.

Students who have received credit for an equivalent course taken elsewhere may not register for this course.

Credit will be given for only one of Mathematics 191a, 193ab, and 198ab.

Mathematics 199b Calculus II (for Life Sciences) 3-3-0
The definite integral, area, integration by substitution and parts. Applications to Biology, Chemistry, Medicine and Environment Science. Separable and linear differential equations. The emphasis is on conceptual understanding and computational competency.

Prerequisite: Mathematics 198ab or 191a or the equivalent.

This course is intended for students who lack collegial Mathematics NYB or the equivalent.

Students who have received credit for an equivalent course taken elsewhere may not register for this course.

Credit will be given for only one of Mathematics 192b, 195ab, and 199b.

Mathematics 210a Ordinary Differential Equations 3-3-0
Techniques for solving first and second order linear differential equations. Systems of first order equations. Power series solutions for second order equations including the method of Frobenius. Various applications of differential equations.

Prerequisite: Mathematics 106

See Physics 270

Students may not take this course for credit if they have received credit for Physics 270

Mathematics 211b Mathematical Methods of Physics 3-3-0
Discussion of series solutions in connection with the gamma function and Bessel, Legendre and hypergeometric functions. Laplace transform with applications. Elementary trigonometric Fourier series and boundary value problems. Certain partial differential equations of physics.

Prerequisites: Mathematics 210a

See Physics 271

Students may not take this course for credit if they have received credit for Physics 271

Mathematics 213a Introduction to Probability 3-3-0
Discrete and continuous distributions. Moments, mean and variance. Moment generating functions. Multivariate distributions. Laws of large numbers. Sampling distributions. Central Limit Theorem.

Prerequisite: Mathematics 106a

Mathematics 214b Introduction to Mathematical Statistics 3-3-0
Further sampling distributions: Chi-square, t and F. Estimation, confidence intervals. Hypothesis testing, theory and practice. Regression and correlation. Analysis of Variance. Nonparametric methods.

Prerequisite: Mathematics 213a

Mathematics 215a Real Analysis I 3-3-0
Real number system. Completeness theorem. Sequences of real numbers. Bolzano-Weierstrass Theorem. Cauchy sequences. Series of real numbers. Limits. Continuous functions. Differentiation. Mean-Value Theorem. L'Hospital's rule. Riemann integration. Fundamental Theorem of Calculus.

Prerequisite: Mathematics 107b.

Mathematics 216b Real Analysis II 3-3-0
The generalized Riemann integral (improper integrals). Sequences and series of functions. Pointwise and uniform convergence. Power series. Taylor series. Classical theorems (integration, differentiation, Weierstrass M-test. Cauchy-Hadamard theorem). Equicontinuity. Ascoli-Arzelà theorem. Stone-Weierstrass approximation theorem).

Prerequisite: Mathematics 215a

Offered alternately with Mathematics 217b

Mathematics 217b Complex Analysis 3-3-0
Sequences and series of complex numbers. Functions. Limits. Continuous functions. Analytic functions. Cauchy-Riemann equations. Contour integration. Cauchy's theorem. Cauchy integral formula. Taylor and Laurent series. Singularities and residues.

Prerequisite: Mathematics 215a.

Offered alternately with Mathematics 216b

Mathematics 221a Introduction to Modern Algebra I 3-3-0
Introduction to the theory of groups. Symmetries of a square. The dihedral groups. Cyclic groups, permutation groups. Isomorphisms, external and internal direct sums. Cosets and Lagrange's theorem. Factor groups.

Prerequisite: Mathematics 105ab, Mathematics 109b

Mathematics 222b Introduction to Modern Algebra II 3-3-0
Additional topics from group theory. Introduction to Ring Theory. Integral Domains and Fields. Factorization of Polynomials. Finite Fields. Introduction to Algebraic Coding Theory.

Prerequisite: Mathematics 221a

Mathematics 224 Cryptography 3-3-0
Cryptography is a key technology in electronic security systems. The aim of this course is to explain the basic techniques of modern cryptography and to provide the necessary mathematical background. Topics may include: the classical encryption schemes, perfect secrecy, DES, prime number generation, public-key encryption, factoring, digital signatures, quantum computing.

Prerequisites: Mathematics 105, 108

Professor Brüstle

Mathematics 225b Numerical Methods 3-3-0
Numerical techniques for problem solving in Mathematics, Computer Science and Physics. Error analysis, roots of equations, QR-algorithm, interpolation, Numerical approaches to differentiation, integration and solutions of differential equations.

Prerequisites: Computer Science 111ab. Mathematics 107, 108.

Note: See CSC 275 and Phy 275.

Students may not take this course for credit if they have received credit for Computer Science 275 or Physics 275.

Mathematics 226a Mathematical Problem Solving 3-3-0
A course designed to foster problem solving abilities in mathematics. New mathematical concepts will be introduced to the student through solving specific problems. Problems will be taken from Putnam and Mathematics Olympiad competitions and from actuarial examinations.

Prerequisites: Mathematics 107, 108

Mathematics 271b Econometrics II 3-3-0
Ordinary least-square estimation and hypothesis testing using matrix algebra. The topics include: generalised least squares estimation, distributed (eg. models, two-stage) least squares estimation, and the Granger causality test.

See EMA 361b

Students may not take this course for credit if they have received credit for EMA 361b.

Mathematics 272b Mathematical Economics II 3-3-0
The application of differential and difference equations, and mathematical programming, to model building and problem solving in Economics.

See EMA 362b

Students may not take this course for credit if they have received credit for EMA 362b.

Mathematics 275b Theoretical Aspects of Computer Science 3-3-0

The course will include several of the following topics: Computational models; Computational complexity; Finite-state machines; Context-free languages; Pushdown automata; Turing machines; Undecidable problems.

Prerequisite: Math 105

See Computer Science 305b

Students may not take this course for credit if they have received credit for Computer Science 305b.

Mathematics 277a Design and Analysis of Algorithms 3-3-0

This course is intended to make students familiar with most of the existing techniques for problem solving. It starts with an introduction to algorithms efficiency, solving recurrence relations and basic data structures. Then different techniques for algorithms design are discussed; the divide-and-conquer technique, the greedy technique and its applications to graph algorithms, dynamic programming, backtracking and genetic algorithms. At the end, students are briefly introduced to the vast area of "difficult" problems, or NP-complete.

Prerequisite: Computer Science 204 and Mathematics 105.

See Computer Science 217a.

Students may not take this course for credit if they have received credit for Computer Science 217a.

Mathematics 278b Advanced Mechanics 3-3-0

Dynamics of macroscopic bodies. Newtonian gravitation: planetary orbits; tides. Elasticity; the flexure of elastic bodies. Relativistic dynamics of particles. The Lagrangian and Hamilton's Principle.

Prerequisite: Physics 117a, Mathematics 210a

Offered alternate years

See Physics 218b

Students may not take this course for credit if they have received credit for Physics 218b.

Mathematics 279b Scientific Programming 3-3-3

This course is designed as an introduction to programming languages and environments suitable for the numerically intensive applications in the natural sciences and mathematics. Examples will be given to illustrate the use of Fortran in numerical calculations. Other examples will be tackled using the Maple language initially developed to handle problems in symbolic computation.

Prerequisite: CSC 204, Math 191, Math 192

See Computer Science 208b, Physics 278B

Students may not take this course for credit if they have received credit for Computer Science 208b or Physics 278b.

Mathematics 301b Vector Analysis 3-3-0

Algebra of vectors. Vector-valued functions. Vector differential and integral calculus. Theorems of Gauss, Green and Stokes. Differential forms. Differentiability in \mathbb{R}^n . Inverse function theorem.

Prerequisite: Mathematics 107b.

Mathematics 302b Tensor Analysis 3-3-0

General curvilinear coordinates. Differential forms. Bilinear forms and tensors of rank two. Tensor algebra and tensor calculus.

Prerequisite: Mathematics 301a.

Mathematics 305b Calculus of Variations 3-3-0

Euler-Lagrange equations for constrained and unconstrained single and double integral variational problems. Parameter-invariant single integrals. General variational formula. The canonical formalism. Hilbert's independent integral. Hamilton-Jacobi equation and the Cavatheyodory complete figure. Fields and the Legendre and Weierstrass sufficient conditions.

Prerequisites: Mat 107, Mat 210

See Physics 276

Students may not take this course for credit if they have received credit for Physics 276

Mathematics 306b Differential Geometry 3-3-0

Curves in 3-space. Euclidean motions, surface theory. Introduction to differential manifold, Gaussian and mean curvature, imbedding conditions. Geodesics, parallel transport and the Gauss-Bonnet Theorem.

Prerequisite: Mat 107, Mat 210

Mathematics 321a Graph Theory 3-3-0

An introduction to the combinatorial, algorithmic and algebraic aspects of graph theory.

Prerequisite: Mat 105

Note: See CSC371. Students may not take this course for credit if they have received credit for CSC371.

Mathematics 331b Metric Spaces and Topology 3-3-0

Sets, functions, images and preimages. Topological spaces, metric spaces. Open and closed sets, accumulation points, continuous functions, homeomorphisms. Some topological properties, particularly connectedness and compactness.

Pre-requisite: Mathematics 215a, or consent of the instructor.

Mathematics 333b Infinite Abelian Groups 3-3-0

Structure of finite abelian groups, examples of infinite abelian groups, torsion and torsion-free groups, divisible groups, pure subgroups, algebraically compact groups, classification of torsion-free groups of rank 1. Generalizations of group concepts to modules over a principal ideal ring.

Prerequisite: Mathematics 221a, 222b

400 level courses are for Honours students only

Mathematics 450a, 451b Topics in Algebra I and II 3-3-0

A selection is made to suit the interests of students from such topics as: ring theory, introduction to homological algebra, introduction to group representations or commutative algebra.

Prerequisite: Mathematics 109b, 222b or consent of instructor.

Offered by arrangement.

Mathematics 452a Topics in Analysis I 3-3-0

Normed spaces, Banach and Hilbert spaces, Hilbert space operators, Normed algebras, Stone-Weierstrass theorem. Special function spaces.

Prerequisite: Mathematics 216b.

Mathematics 453b Topics in Analysis II 3-3-0

Theory of integration. Measurable functions, measures and integrable functions. Lebesgue spaces. Models of convergence. Decomposition and generation of measures. Product measures.

Prerequisite: Mathematics 216b.

Offered by arrangement.

Mathematics 454a, 455b Topology

Offered by arrangement.

Mathematics 456a Independent Studies I 3-0-0

Open to final-year honours students by arrangement with the department.

Mathematics 457b Independent Studies II 3-0-0

See Mathematics 456a.

Cognate Courses:

Philosophy 151 may count as a cognate for the Honours or Major program.

Physics

Physics is often regarded as the cornerstone of the Natural Sciences. It encompasses a diverse range of disciplines including electronics, astrophysics, particle physics, and solid state physics. The **BSc Honours** program prepares students for direct entry into graduate work in physics (leading to an MSc or PhD degree). The **BSc Major** program prepares students for industry, education and, on completion of a qualifying year, graduate work in physics. The Major program has sufficient electives to allow a substantial number of courses to be taken in another discipline (minor program), or even a second Major program in a related discipline.

The **Master of Science** (MSc) program is designed to give students a deeper appreciation of physics while at the same time training them to become independent researchers. Graduate supervision is available in a wide variety of disciplines including astrophysics, theoretical cosmology and gravitational theory, theoretical condensed matter physics, and particle physics.

Undergraduate Programs

Entrance Requirements (BSC)

Quebec Students:

To enter a Physics program, a student from Quebec must normally have a Quebec collegial diploma (D.E.C.) in science, or the equivalent, including Mathematics NYA, NYB, Physics NYA, NYB, Chemistry NYA, NYB, and Biology NYA. While Physics NYA and NYB are accepted as the prerequisite for the Physics programs, Physics NYC is strongly recommended as a satisfactory preparation. Students having these prerequisites can normally complete their undergraduate program in three years.

Non-Quebec Students:

Students entering a four-year degree program (after completion of Ontario OSSD, grade 12 in other provinces, or the US equivalent) must register in the required collegial equivalent science courses (Chemistry, Mathematics and Physics 191, 192, and all related lab courses) in their first year. They must also register in their first year for English Language 116, or another English course, and also three additional credits selected from Humanities courses in English, History, Classical Studies, Philosophy, Religion or Liberal Arts.

Minor:

A minor in Physics consists of Physics 101a, 106, 107, 117a and four other lecture courses in Physics selected from 200 level courses. The total course credit requirement for the minor is 24 credits.

Major:

The following courses are required for a Physics Major: Physics 101a, 106a, 107b, 117a, 210a, 211b, 212b, 213a, 214b, 216b, 218b, 220a, 270a, 271b. Mathematics 106a, 107b, 108a, 109b, Computer Science 111ab.

Total: 42 course credits physics, 12 credits mathematics, 4 credits computer science, 33 credits options, = 91 course credits.

When any lecture course (e.g., Phy 106a) also has an associated laboratory course (e.g. Phy 186a), both the lecture and laboratory courses must be taken concurrently.

Laboratory credits thus obtained are in addition to the total required lecture credits specified above for the program.

Honours:

The following courses are required for the Physics Honours degree: All of the courses required for a Physics Major and Mathematics 217a, Physics 461a, 462b, 480, plus any one of Physics 463, 464, 465, 466, 467, 469, 470, and 476.

Total Requirements: 57 course credits Physics, 15 credits Mathematics, 4 credits Computer Science, and 15 credits of elective courses = 91 course credits.

When any lecture course (e.g., Phy 106a) also has an associated laboratory course (e.g. Phy 186a), both the lecture and laboratory courses must be taken concurrently. Laboratory credits thus obtained are in addition to the total required lecture credits specified above for the program.

Entrance Requirements for Honours Program:

A student will normally be admitted to the honours program after obtaining at least a 70% average on all required U1 physics and mathematics courses. In order to complete an honours degree, a student must normally obtain an average of at least 65% in required physics courses in each academic year.

Laboratory Courses:

When any lecture course (e.g., Phy 106a) also has an associated laboratory course (e.g. Phy 186a), both the lecture and laboratory courses must be taken concurrently. Laboratory credits thus obtained are in addition to the total required lecture credits specified above for the program.

Graduate Programs

Entrance Requirements (MSc):

Students who have completed a BSc degree in physics with at least a B average will be considered for admission into the graduate program. Students who have completed only a major in the subject may be required to take additional courses at the Master's level. Students who have been admitted will be assigned a supervisor by the Chair of Physics. The student's research interests will be taken into consideration when a supervisor is assigned. Current areas of research in the department include astrophysics, condensed matter physics, gravity and cosmology, particle physics and theoretical physics.

Course Requirements (MSc):

The MSc degree requires the successful defense of a thesis (15 credits), participation in the seminar series (18 credits), and the completion of a minimum of 12 credits in course work. Course selection is determined in consultation with the thesis supervisor and departmental chair. All MSc students must make an oral presentation and defense of their thesis before graduating. The normal period for completion of the M.Sc. degree requirements is two academic years (four semesters). The minimum number of credits required to complete the program is 45.

COURSE GROUPINGS

Elective Courses

These courses are open to any students with little or no scientific background (some restrictions apply).

PHY111	Physics of Everyday Phenomena
PHY112	Introduction to Holography
PHY113	Introduction to Astronomy
PHY114	Astronomy and Astrophysics

Physics Major Courses

Four-year Program (BSc)

1st year: Courses have numbers that start with 191 to 199.

2nd year: Courses have numbers that start with 100 to 190.

3rd year: Courses have numbers that start with 200 and end at 399.

4th year: Courses have numbers that start with 200 and end at 399.

Three-year Program (BSc)

1st year: Courses have numbers that start with 100 to 190.

2nd year: Courses have numbers that start with 200 and end at 399.

3rd year: Courses have numbers that start with 200 and end at 399.

Physics Honours Courses

Final-year Honours physics courses have numbers that start with 400 and end at 480.

Graduate Courses

All graduate MSc courses have numbers that start with 500 or above.

Physics 191a Introductory Physics I (Mechanics) 3-3-0

This course is designed to give students an introduction to classical mechanics. Topics that will be covered include statics, particle kinematics in one and two dimensions, particle dynamics and Newton's Laws, conservation of energy and momentum, and rotational kinematics and dynamics.

Corequisite: Mathematics 191a, or 198a

This course should be taken concurrently with Physics 081. This course is for students who lack collegial Physics NYA. Students who have received credit for an equivalent course taken elsewhere may not register for this course. Credit will be given for only one of Physics 191a, 193a or 199f.

Physics 081a Introductory Physics Laboratory I 1-0-4

A series of experiments in General Physics to complement the material covered in Physics 191a.

This course must be taken concurrently with Physics 191a. May not be taken for credit if credit has been granted for Physics 083a.

Physics 192b Introductory Physics II (Electricity and Magnetism) 3-3-0

This course is designed to give students an introduction to electromagnetism and its applications. Topics that will be covered include Coulomb's Law, electric fields, electric potential, capacitance, direct current circuits, magnetism, electromagnetic induction, alternating current circuits, and electromagnetic waves.

Prerequisite: Physics 191a, 193a, or the permission of the instructor.

Corequisite: Mathematics 192b, or 199b

This course should be taken concurrently with Physics 082. This course is for students who lack collegial Physics NYB. Students who have received credit for an equivalent course taken elsewhere may not register for this course. Credit will be given for only one of Physics 192b, 194b or 199f.

Physics 082b Introductory Physics Laboratory II 1-0-4

A series of experiments in General Physics to complement the material covered in Physics 192b.

This course must be taken concurrently with Physics 192b. May not be taken for credit if credit has been granted for Physics 084b.

Physics 193a Physics for the Life Sciences I 3-3-0

This course is designed to emphasize topics of particular relevance to the life sciences. Topics that will be covered include: mechanics (statics, kinematics, dynamics, conservation of energy and momentum, rotational motion); fluid dynamics (pressure, elasticity, viscosity, diffusion); and thermodynamics (temperature, heat transport, kinetic theory of gases). Concepts and problem-solving skills are emphasized.

Corequisite: Mathematics 191a or Mathematics 198a

This course should be taken concurrently with Physics 083. This course is for students who lack collegial Physics NYA.

Students who have received credit for an equivalent course taken elsewhere may not register for this course.

Credit will be given for only one of Physics 191a, 193a, and 199f.

Physics 083a Physics for the Life Sciences Laboratory I 1-0-4

A series of experiments in college physics to complement the material covered in Physics 193a.

This course must be taken concurrently with Physics 193a. May not be taken for credit if credit has been granted for Physics 081a.

Physics 194b Physics for the Life Sciences II 3-3-0

This course is designed to emphasize topics of particular relevance to the life sciences. Topics that will be covered include: vibrations and waves; sound; electrostatics (charges, electric fields and potential); circuits; magnetism (forces, induction, electromagnetic waves); optics (interference, diffraction, instruments); and modern physics (atoms, radioactivity, MRI, CAT).

Prerequisite: Physics 191a or Physics 193a or the permission of the instructor.

Corequisite: Mathematics 192b or Mathematics 199b.

This course should be taken concurrently with Physics 084. This course is for students who lack collegial Physics NYB.

Students who have received credit for an equivalent course taken elsewhere may not register for this course.

Credit will be given for only one of Physics 192b, 194b, and 199f.

Physics 084b Physics for the Life Sciences Laboratory II 1-0-4

A series of experiments in college physics to complement the material covered in Physics 194b.

This course must be taken concurrently with Physics 194b. May not be taken for credit if credit has been granted for Physics 082b.

Physics 199 Introduction to University Physics 6-6-0

An introduction to the fundamentals of classical physics. Concepts and problem-solving skills are emphasized. Topics in the area of mechanics include: translational, rotational, and oscillatory motion; Newtonian dynamics; conservation of energy, linear momentum, and angular momentum; heat and the kinetic theory of gases. Topics in the area of electricity and magnetism include: electric fields and potentials; AC and DC circuit theory; magnetism and the properties of magnetic materials; electromagnetic waves and optics.

Prerequisites: Students must normally have completed upper-level high school physics and mathematics courses, or must satisfy admission requirements into the B.Sc. degree at Bishop's University. Students taking this course require a knowledge of basic calculus which may be gained concurrently.

Corequisite: Physics 089

Students may not have credit for both Physics 199 and other introductory physics courses (i.e., Physics 191 and 192 or their equivalents).

Physics 089 Introduction to University Physics Laboratory 2-0-8

A series of experiments that complements the lecture material in PHY199. This laboratory course includes experiments in measurement and uncertainty, statics, dynamics, collisions, AC and DC circuit analysis, electrostatics, magnetism optics and thermodynamics.

Corequisite: Physics 199

Students may not have credit for both Physics 089 and other introductory physics laboratory courses (i.e., Physics 081 and 082 or their equivalents).

Physics 101a Statistical Methods in Experimental Science 3-3-1

This course is specifically designed to meet the needs of students of physics, chemistry, biology, mathematics and computer science. Topics include: errors of observation, graphical visualization of data; descriptive analysis, elementary probability, permutations and combinations; the binomial, normal and Poisson distributions; random sampling; testing hypotheses, significance levels, confidence limits, large and small sampling methods; regression and correlation; chi-square test; analysis of variance.

Note: In order for students to obtain credit for both Physics 101 and Mathematics 213, Physics 101 must be taken first or concurrently. Students who are enrolled in, or who have credit for, PMA160, BMA141, or EMA141 may not enrol in this course.

Physics 106	Waves and Optics	3-3-0
Wave phenomena. Wave and photon theories of light. Huygen's Principle and its applications. Geometrical optics. Optical instruments. Basic models of Interference, Diffraction and Polarization of light. <i>Co-requisite: Physics 186a</i>		
Physics 086	Waves, Optics, & Electromagnetism Laboratory	1-0-4
A series of experiments in wave motion, geometrical and physical optics, and electricity and magnetism to complement the material covered in the lecture courses Physics 192b and Physics 106b. This course must be taken concurrently with Physics 192b and Physics 106b. <i>Co-requisites: Physics 192b and Physics 106b</i>		
Physics 186	Waves and Optics Laboratory	1-0-4
Experiments in geometrical and physical optics. This course must be taken concurrently with Physics 106a.		
Physics 107	Thermal and Fluid Physics	3-3-0
Pressure, hydrostatics, and hydrodynamics. Properties of materials and Young's Modulus. Temperature and Heat. Kinetic theory of gases. Energy, work, heat. First, second, and third laws of thermodynamics. Entropy and Disorder. Specific heat of solids, black body radiation, statistical thermodynamics involving different distributions and their applications. <i>NOTE: See Environmental Science 167. Students may not take this course for credit if they have received credit for Environmental Science 167.</i>		
Physics 111	The Physics of Everyday Phenomena	3-3-1
This course is designed to meet the needs of non-science students by providing them with a practical introduction to physics and science as it applies to everyday life. Students are assumed to have no background in math or science. By allowing students to practice science through practical demonstrations of physical phenomena and engaging in small-group inquiry and discussion, they will learn to think logically when solving problems, enhance their scientific literacy, and develop their physical intuition. Typical questions that will be addressed include: Why is the sky blue? Why purchase a car with an anti-locking brake system (ABS)? Where is lightning most likely to strike and how can you best protect yourself? How do medical scanning procedures such as MRI work? Does a curve ball really curve or is it an optical illusion? <i>Note: Students enrolled in a program in the Division of Natural Sciences and Mathematics cannot use this course for science credits.</i>		
Physics 112/Fine Arts 209	Introduction to Holography	3-3-0
This course is designed to give students an introduction to the principles of laser holography (3-D photography) while at the same time providing them with the opportunity to create holograms in the laboratory. <i>Students are assumed to have no background in mathematics or science.</i> Students will make holograms using single and multiple beam reflection and transmission techniques. Special topics related to the making of rainbow, colour, and other types of holograms will be discussed and attention will be given to the application of this medium as a form of visual expression. In addition students will be able to apply their knowledge to create holograms at home (sandbox holography). <i>Prerequisite: permission of the instructor.</i> <i>See Fine Arts 209</i> <i>Students may not take this course for credit if they have received credit for Fine Arts 209</i> <i>Students enrolled in a program in the Division of Natural Sciences and Mathematics cannot use this course for science credits.</i>		
Physics 113	Introduction to Astronomy	3-3-1
An outline of our knowledge of the size, structure and possible origin of the Universe. Starting with the primitive speculations of the Greeks, the course ends with the theory of the expanding universe and its origin in the "Big Bang". <i>Prerequisite: Students should have a background in high school mathematics.</i>		
Physics 114	Astronomy and Astrophysics	3-3-0
A survey of our understanding of the physical properties of the universe. Topics to be studied include: observational astronomy, stellar evolution, binary stars, white dwarfs, neutron stars, black holes, galaxies, quasars, large scale structure of the universe, and cosmology. <i>Prerequisite: Mathematics 191 (or equivalent), or permission of the instructor.</i>		
Physics 117a	Introduction to Mechanics	3-3-0
Statics: equilibrium of bodies subject to many forces. Kinematics; rectilinear, plane, circular and simple harmonic motion. Dynamics: conservation of mechanical energy and momentum; plane and circular motion of particles; rotation of macroscopic bodies. Non-Inertial Frames. <i>Prerequisite: Physics 191a or equivalent</i> <i>Corequisite: Mathematics 106a</i> <i>Note: See MAT177a. Students may not take this course for credit if they have received credit for MAT177a.</i>		

Physics 210a	Electricity and Magnetism I	3-3-0
Review of vector calculus. Electrostatics: fields and potentials of point charges, dipoles, and distributed charges; Gauss's theorem; Poisson's and Laplace's equations; dielectrics; capacitance. Current electricity. <i>Prerequisite: Physics 117a, Mathematics 107b; corequisite Physics 284</i> <i>Offered alternate years</i>		
Physics 211b	Electricity and Magnetism II	3-3-0
Magnetic phenomena, magnetic induction, Ampere's Law, and solenoids. Faraday's Law and the displacement current. Magnetic and dielectric materials. Magnetic and electric fields: Maxwell's equations of the electro-magnetic field; plane electromagnetic radiation in dielectrics and conducting media. Radiation and Antennae. <i>Prerequisite: Physics 210a</i> <i>Offered alternate years</i>		
Physics 212	Electric Circuits and Electronics	3-3-0
Review of D.C. circuits, Kirchoff's laws, network theorems. Network analysis for A.C. circuits, phasors. Diode circuits and filters. The physical basis of semiconductor devices including semiconductor diodes, junction transistors, and field-effect transistors. The operation of transistor amplifiers, digital electronics and integrated circuits will also be covered. <i>Note: See CSC 272.</i> <i>Students may not take this course for credit if they have received credit for Computer Science 272.</i> <i>Prerequisite: Permission of instructor.</i>		
Physics 213a	Modern Physics I	3-3-0
Fundamentals of modern physics, special theory of relativity, quantization of electromagnetic radiation, wave properties of particles, the hydrogen atom, atomic and X-ray spectra. <i>Prerequisite: Physics 106a, or permission of the instructor; co-requisite Physics 283</i> <i>Offered alternate years</i>		
Physics 214b	Modern Physics II	3-3-0
Schrodinger's Equation. The hydrogen atom, orbital theory, and the Zeeman effect. Overview of solid state physics. Nuclear structure, nuclear decay, nuclear models, nuclear reactions, and nuclear detectors. Elementary particles. <i>Prerequisite: Physics 213a</i> <i>Offered alternate years</i>		
Physics 216	Physical and Contemporary Optics	3-3-0
Wave theory, polarization, interference diffraction. Basics of coherence theory, lasers, holography. Quantum nature of light. <i>Prerequisite: Physics 106a</i> <i>Offered alternate years</i>		
Physics 218	Advanced Mechanics	3-3-0
Newtonian gravitation: planetary orbits; tides. The Lagrangian and Hamilton's Principle. Applications to the dynamics of particles. Theory of Vibrations and Small Oscillations. Dynamics of macroscopic bodies. Non-linear dynamics. <i>Prerequisite: Physics 117a, Physics 270a, or permission of the instructor.</i> <i>Offered alternate years</i> <i>Note: See Mat 278. Students may not take this course for credit if they have received credit for Mat 278.</i>		
Physics 220	Statistical and Thermal Physics	3-3-0
The statistical definition of entropy and temperature. Statistical Ensembles. The Planck and Maxwell-Boltzmann distributions. The Fermi and Bose distributions. Thermodynamic functions. Applications of Fermi-Dirac and Bose-Einstein statistics. <i>Prerequisite: Physics 107b</i> <i>Offered alternate years</i>		
Physics 230b	Relativity Theory	3-3-0
The geometry of space-time. Covariance. Relativistic mechanics of particles in curved space-times. Electromagnetic radiation. Einstein's field equations. Applications to cosmology. <i>Prerequisite: Physics 117a</i>		
Physics 265b	Data Communications	3-3-0
This course will cover how data flows in communications networks. Topics: Hardware, software and basic components of data communications; frequency domain representation, modulation, multiplexing; network configurations. <i>Prerequisite: Computer Science 111ab, Computer Science 116a, or permission of the instructor.</i> <i>Note: See Computer Science 215b. Students may not take this course for credit if they have received credit for Computer Science 265b.</i>		

Physics 270a	Differential Equations	3-3-0
Techniques for solving first and second order linear differential equations. Systems of first order equations. Power series solutions for second order equations including the method of Frobenius. Various applications of differential equations.		
<i>Prerequisite: Mathematics 107b</i>		
<i>Note: See Mathematics 210a. Students may not take this course for credit if they have received credit for Mathematics 210a.</i>		
Physics 271b	Mathematical Methods of Physics	3-3-0
Discussion of series solutions in connection with the gamma function and Bessel, Legendre and hypergeometric functions. Laplace transform with applications. Elementary trigonometric Fourier series and boundary value problems. Certain partial differential equations of physics.		
<i>Prerequisites: Mathematics 210a or Physics 270a</i>		
<i>Note: See Mathematics 211a. Students may not take this course for credit if they have received credit for Mathematics 211b.</i>		
Physics 274ab	Data Mining for Scientists	4-3-3
Data is now created faster than humans are able to understand it and use it. There may be patterns hiding within this data with potentially useful information. This course will teach students, including Biology and Biochemistry students as well as those from Computer Science, how to discover these patterns for the purpose of solving problems, gaining knowledge, and making predictions. Topics covered in this course include data preparation, clustering, classification, association rules for mining and linear regression. This course includes assignments and a final project where the students are required to perform mining on real datasets drawn from the biological and physical sciences.		
<i>Prerequisites: PHY 101 (or equivalent)</i>		
<i>See CSC 205</i>		
<i>Students may not take this course for credit if they have received credit for Computer Science 205.</i>		
Physics 275	Numerical Methods	3-3-0
A course introducing those numerical methods best suited to a computer. Error analysis, roots of equations, QR-algorithm, interpolation, Numerical approaches to differentiation, integration and solutions of differential equations.		
<i>Prerequisites: Computer Science 111ab. Mathematics 107, 108</i>		
<i>Note: See Mathematics 225 and CSC 275. Students may not take this course for credit if they have received credit for Mathematics 225 or Computer Science 275.</i>		
Physics 276	Calculus of Variations	3-3-0
Euler-Lagrange equations for constrained and unconstrained single and double integral variational problems. Parameter-invariant single integrals. General variational formula. The canonical formalism. Hilbert's independent integral. Hamilton-Jacobi equation and the Caratheodory complete figure. Fields and the Legendre and Weierstrass sufficient conditions.		
<i>Prerequisite: Permission of the Instructor</i>		
<i>Note: See MAT305. Students may not take this course for credit if they have received credit for MAT305.</i>		
Physics 278	Scientific Programming	3-3-3
This course is designed as an introduction to programming languages and environments suitable for the numerically intensive applications in the natural sciences and mathematics. Examples will be given to illustrate the use of Fortran in numerical calculations. Other examples will be tackled using the Maple language initially developed to handle problems in symbolic computation.		
<i>Prerequisite: CSC 204</i>		
<i>Note: See CSC 208 and MAT 279. Students may not take this course for credit if they have received credit for CSC208 or MAT 279.</i>		
Physics 283f	Intermediate Physics Laboratory I	2-0-4
Experiments in modern physics, classical mechanics, thermodynamics, and low-temperature physics will be carried out. Computer interfaces will be used to collect and analyse data.		
<i>Corequisite: Physics 213a</i>		
<i>Offered alternate years</i>		
Physics 284f	Intermediate Physics Laboratory II	2-0-4
Experiments in electricity and magnetism, electronics, and physical optics will be carried out. Computer interfaces will be used to collect and analyse data.		
<i>Corequisite: Physics 210a</i>		
<i>Offered alternate years</i>		

Physics 335/ENV 375	Environmental Physics	3-3-0
This quantitative, calculus-based, course discusses fundamental environmental problems within a physical context. Topics covered include: the greenhouse effect, black-body radiation, the ozone problem, mathematical techniques, heat transfer, electricity, the transport of pollutants, plumes, and basic groundwater hydrology.		
<i>Prerequisites: Environmental Science 101; Physics 107 or Environmental Science 167.</i>		
<i>Note: See Environmental Science 375. Students may not take this course for credit if they have received credit for Environmental Science 375.</i>		
Physics 461a	Quantum Mechanics I	3-3-0
Foundation of quantum mechanics; Schrodinger equation, angular momentum, central potentials, harmonic oscillator, hydrogen atom.		
<i>Prerequisite: Physics 214b or permission of the instructor.</i>		
Physics 462b	Quantum Mechanics II	3-3-0
Matrix mechanics and applications of quantum mechanics to various branches of physics. Perturbation theory, scattering, molecular applications, and Hartree-Fock Theory.		
<i>Prerequisite: Physics 461a</i>		
Physics 463	Nuclear Physics	3-3-0
Nuclear structure and systematics; alpha emission, beta decay, gamma emission, two-body systems and nuclear reactions; neutron physics; sub-nuclear particles.		
<i>Prerequisite: Physics 461a</i>		
Physics 464	Condensed Matter Physics	3-3-0
Topics to be studied include the one-electron theory of solids, energy bands, lattice vibrations, transport theory, and thermodynamic properties.		
<i>Prerequisite: Physics 214, 220, or permission of the department.</i>		
Physics 465	Electromagnetic Theory	3-3-0
Static and dynamic electric and magnetic fields; Maxwell's equations and solutions involving plane waves. Covariant formulation of electromagnetic field theory.		
<i>Prerequisite: Physics 211b</i>		
Physics 466ab	Theoretical Topics	3-3-0
Topics to be studied will be selected from the areas of special and general relativity, particle physics, astrophysics and cosmology. In particular, the covariant nature of physics and various physical symmetries will be investigated.		
<i>Prerequisites: Physics 214, 218, 220; or the permission of the instructor</i>		
Physics 467	Statistical Mechanics	3-3-0
Derivation of the laws of thermodynamics from statistical principles. Quantum statistics, arbitrarily degenerate and relativistic perfect gases, transport theory, thermodynamic fluctuations, and low-temperature physics will also be studied.		
<i>Prerequisite: Physics 220b</i>		
Physics 469a	Independent Studies I	3-0-0
Physics 470b	Independent Studies II	3-0-0
Physics 474ab	Relativistic Astrophysics	3-0-0
Topics to be studied include: Cosmology, inflation, dark energy, compact objects, relativistic fluid dynamics, gravitational lensing and gravitational waves.		
<i>See Physics 574</i>		
<i>Students who take this course for credit may not receive credit for Physics 574.</i>		
Physics 475	Numerical Methods & Simulations	3-3-0
This course will cover selected topics in High Performance Computing including cellular automata, finite element methods, molecular dynamics, Monte Carlo methods, and multigrid methods. Applications of the algorithms to the study of classical fields, fluid dynamics, materials properties, nanostructures, and biomolecules will be addressed depending on the interests of the students.		
<i>See Physics 575ab. Students may not take this course for credit if they have received credit for Physics 575ab.</i>		
Physics 476	Stellar Astrophysics	3-3-0
An introduction to the properties of stellar atmospheres and interiors. The equations of stellar evolution, nuclear energy generation, radiative transport and stellar model building will be studied. Further topics include the formation of stars, and the physics associated with supernovae, white dwarfs, neutron stars, pulsars and black holes.		
Physics 480	Honours Research Dissertation	6-1-6
Each student is required to carry out either an experimental or theoretical project under the supervision of a faculty member. A plan outlining the proposed research must be submitted for approval during the first four weeks of the course. Each student will present his/her results in the form of a seminar and a written dissertation.		
<i>Prerequisite: U3 Honours Physics registration or permission of the department.</i>		

Physics 561	Quantum Mechanics I	3-3-0
Foundation of quantum mechanics; Schrodinger equation, angular momentum, central potentials, harmonic oscillator, hydrogen atom. <i>Prerequisite: Physics 214b or permission of the instructor.</i> <i>Students who have received credit for Physics 461a may not enrol in this course.</i>		
Physics 562	Quantum Mechanics II	3-3-0
Matrix mechanics and applications of quantum mechanics to various branches of physics. Perturbation theory, scattering, molecular applications, and Hartree-Fock Theory. <i>Prerequisite: Physics 461a</i> <i>Students who have received credit for Physics 462b may not enrol in this course.</i>		
Physics 564	Condensed Matter Physics	3-3-0
Topics to be studied include the one-electron theory of solids, energy bands, lattice vibrations, transport theory, and thermodynamic properties. <i>Prerequisite: Physics 214, 220, or permission of the department.</i> <i>Students who have received credit for Physics 464 may not enrol in this course.</i>		
Physics 565	Electromagnetic Theory	3-3-0
Static and dynamic electric and magnetic fields: Maxwell's equations and solutions involving plane waves. Covariant formulation of electromagnetic field theory. <i>Prerequisite: Physics 211b</i> <i>Students who have received credit for Physics 475 may not enrol in this course.</i>		
Physics 566	Theoretical Topics	3-3-0
Topics to be studied will be selected from the areas of special and general relativity, particle physics, astrophysics and cosmology. In particular, the covariant nature of physics and various physical symmetries will be investigated. <i>Prerequisites: Physics 214, 218, 220; or the permission of the instructor.</i>		
Physics 567	Statistical Mechanics	3-3-0
Derivation of the laws of thermodynamics from statistical principles. Quantum statistics, arbitrarily degenerate and relativistic perfect gases, transport theory, thermodynamic fluctuations, and low-temperature physics will also be studied. <i>Prerequisite: Physics 220b</i> <i>Students who have received credit for Physics 467 may not enrol in this course.</i>		
Physics 571	Advanced Quantum Theory	3-3-0
Topics to be studied include: Path integral and second quantization approaches to non-relativistic quantum mechanics. Feynman rules and diagrams. Relativistic quantum field of spin-zero particles.		
Physics 572	Particle Physics	3-3-0
Quantum field theory of spin 1/2 and spin 1 particles will be introduced. Topics include: renormalization and the renormalization group; quantum electrodynamics and quantum chromodynamics; the Standard Model of particle physics; overview of string theory.		
Physics 573	Advanced General Relativity	3-3-0
Topics to be studied include: differential geometry, Einstein equations, the weak field limit, gravitational waves, black holes, and relativistic cosmology.		
Physics 574	Relativistic Astrophysics	3-3-0
Topics to be studied include: Cosmology, inflation, dark energy, compact objects, relativistic fluid dynamics, gravitational lensing, and gravitational waves.		
Physics 575	Numerical Methods & Simulations	3-3-0
This course will cover selected topics in High Performance Computing including cellular automata, finite element methods, molecular dynamics, Monte Carlo methods, and multigrid methods, with applications to classical fields, fluid dynamics, materials properties, nanostructures, and biomolecules.		
Physics 576	Stellar Astrophysics I	3-3-0
An introduction to the properties of stellar atmospheres and interiors. The equations of stellar evolution, nuclear energy generation, radiative transport and stellar model building will be studied. Further topics include the formation of stars, and the physics associated with supernovae, white dwarfs, neutron stars, and pulsars.		
Physics 577	Many-Body Quantum Theory in Condensed Matter Systems	3-3-0
The following topics will be studied: Green's functions at zero and finite temperature; the interacting electron gas; the Hubbard model and strongly correlated systems; electron-phonon interaction; superconductivity and superfluidity.		
Physics 578	Selected Topics in Astronomy & Astrophysics	3-3-0
Topics to be determined in consultation with prospective students.		
Physics 579	Selected Theoretical Topics	3-3-0
Topics to be determined in consultation with prospective students.		

Physics 580f	Graduate Seminar I	9-0-0
Students are expected to participate in the departmental seminar series and to make a presentation on either their own work or on a research-related topic. All M.Sc. Students are normally expected to enrol in this course at the beginning of their first year of studies. <i>Offered alternate years with Physics 581.</i>		

Physics 581f	Graduate Seminar II	9-0-0
Students in the second year of their degree program are expected to participate in the departmental seminar series and to make a presentation on either their own work or on a research-related topic. <i>Course offered alternate years with Physics 580.</i>		

Physics 586	Stellar Astrophysics II	3-3-0
A detailed study of the physics that determines the evolution of stars during all of their possible phases. This includes radiative hydrodynamics and atmospheric modeling, specialized equations of state, and the nuclear physics needed to understand the various channels that lead to the creation of the heavy elements. The physics of neutrino production and detection will also be investigated. These topics will form the basis for a study of the evolution of supernovae and other high-energy phenomena in stellar astrophysics.		

Physics 600ab	Thesis Research Dissertation	15-0-0
Each student is required to carry out independent, publishable research that is presented in the form of a thesis. The research is conducted under the supervision of a faculty member. The thesis will be evaluated externally and must be successfully defended in a meeting that is open to all members of the department.		

Certificate Program Descriptions and Regulations

Certificate of Studies in the Discoveries of Science

Description and objectives:

The Division of Natural Sciences and Mathematics provides a selection of introductory and survey courses, drawn from all the sciences at Bishop's University. The Certificate of Studies in the Discoveries of Science is designed for students interested in the world of modern science: its triumphs, people, techniques, methodologies, and ongoing quest for new discoveries.

While Discoveries of Science courses are inspirational, entertaining, and thought provoking, they also develop critical, analytical, numerical and research skills. An interest in learning about science, and a willingness to explore new territory as an adult learner is far more important than having even a rudimentary background in any particular scientific discipline. These courses are designed and intended for students who have little to no science or mathematical background. A solid willingness to learn, and an enthusiasm for learning something of the fundamental ideas which help us to understand how the physical world around us works is all that is required.

In the twenty-first century, the discoveries of science and the products of the resulting technology impinge upon virtually every aspect of life. It is therefore crucial that a liberally educated university student not leave Academia without some significant experience in the modern sciences. This need not involve specialized studies of any particular discipline, since there is also merit in surveying the manner in which science is presently carried out, and learning about the current discoveries of our scientists, and their ongoing quests for further knowledge of our physical world.

Program structure:

A student must successfully complete any ten (10) courses (plus all co-requisite or integrated laboratories, if any) selected from the course lists below, including at least one from a minimum of six of the nine disciplines.

Note: Not all of the courses listed are offered in every year; and some are offered only infrequently.

Total: minimum 30 lecture-course credits.

Biochemistry

Bch 101b Introduction to Nutrition

Biological Sciences

Bio 107 Birds and Behaviour

Bio 113 Field Biology I (only offered in the spring semester)

Bio 131 The Human Body in Health and Disease

Bio 138 The Genetics Revolution

Bio 193 or Bio 191 Introductory Biology*

- Students also register in the co-requisite, 1-cr. Lab. course,
Bil 193 or Bil 191

Chemistry

Che 131 Liberal Arts Chemistry: Some Chemistry
from Everyday Life

Che 132 Chemistry of Art Conservation and Restoration.

Computer Science

Csc 101 Foundations of Computer Science

Csc 103 Interactive Web Page Design

Csc 107 Databases and Dynamic Web Design
(Csc 103 as pre-requisite)

Csc 113 Digital Imaging for Photography

- The above are all 4-credit courses which include a laboratory component

Csc 201 Computer Ethics

Csc 214 Introduction to Networks

Environmental Science

Env 101b Introduction to Environmental Science

Mat 103 Environmental Modeling

Exercise Science

Exs 101 Introduction to Exercise Science

Exs 127 Introductory Exercise Physiology

Mathematics

Mat 100 Excursions in Modern Mathematics

Mat 101 Further Excursions in Modern Mathematics

Mat 104 History of Mathematics

Mat 105 Discrete Mathematics

Mat 114 Modern Geometry; Euclidean to Fractal*

- Students also register in the co-requisite 1-cr laboratory course,
Mat184

Mat 125 Number Theory*

*These courses require Mat 105 as a pre-requisite

Physics

Phy 111 The Physics of Everyday Phenomenon

Phy 112/ Fin 209 Introduction to Holography

Phy 113 Introduction to Astronomy

Philosophy and History

Sci 201 History of Science

Phi 245 The Philosophy of Science

Certificate in Computer Science

at least 32 credits

Description and objectives:

The Certificate Program in Computer Science is designed for individuals who need to acquire a basic understanding of computers and programming and a knowledge of the field in order to expand their area of interest and professional expertise. This program is organized by the Department of Computer Science. Topics include: Communications, Software Engineering, Graphics and Artificial Intelligence. This program will help students to take full advantage of the computer technology available in the workplace.

Admission requirements: (See Regulations for Certificate Programs).

Prerequisites to programs: Applicants to Option B with insufficient Math background will be required to take a 3-credit Math course in their first semester (Math190 or equivalent).

A) Certificate in Computer Science**1. Required courses: 19 credits**

CSC 101ab	Foundations of Computer Science	4-3-3
CSC 111ab	Programming Methodology	4-3-3
CSC 116ab	Low Level Programming Language	4-3-3
CSC 204ab	Data Structures	3-3-3
CSC 211ab	Computer Organization	4-3-0

2. Elective courses: 5 courses to equal at least 15 credits

Any other Computer Science course except CSC 102.

B) Certificate in Software Technology**1. Required courses: 17 credits**

CSC 101ab	Foundations of Computer Science	4-3-3
CSC 111a	Programming Methodology	4-3-3
CSC 204ab	Data Structures	3-3-0
CSC 303a	Principles of Programming Languages	3-3-3

and at least one of:

CSC 218a C++ Programming	3-3-3
CSC 328b Object Oriented Software Construction	3-3-1
CSC 316ab Special Topics in Software	3-3-0
CSC 319a Special Topics in Computer Science	3-3-0

2. Elective courses: 5 courses to equal at least 15 credits

Any other Computer Science course except CSC 102.

Social Sciences

The Division of Social Sciences offers courses and programs in the areas of Economics, Environmental Studies and Geography, Political Economy, Political Studies, Psychology, and Sociology and Anthropology. In addition to Major and Minor programs, the Departments offer Honours programs which are directed to students wishing higher levels of specialization and to those intending to pursue graduate studies. Many students combine their Honours or Major degrees with Minors from other areas in the Social Sciences or from other Divisions.

DIVISIONAL MAJOR

The Division of Social Sciences also offers an entry-level program for a limited number of students, allowing them to register as Divisional Majors for a maximum of two semesters. Students may pursue courses in any program offered by the Division, but after completion of two semesters of full-time study must enrol in one of the regular Honours, Major or Minor programs offered in the Division of Social Sciences (or in another Division of the University). Students who are not immediately accepted into one of the regular programs in the Division will be classified as special undergraduate (SPU) students, and will be permitted to take courses for a further two semesters (or up to a maximum of 60 credits). During this period as special undergraduate students, the normal university regulations with respect to academic program changes will apply.

TRANSFERS FROM OTHER PROGRAMS

Students may normally transfer into a program in the Division of Social Sciences or between programs within the Division provided they have a minimum cumulative average of 65% on at least 24 course credits completed at Bishop's, or, provided they have demonstrated an aptitude for the program by achieving an average of 65% in all program courses attempted (minimum of 12 credits). For the purpose of these regulations, the cumulative average and course averages used will be those existing at the time the program change request is made.

GRADUATION "WITH DISTINCTION"

Students achieving an average of 80% or better in the last 60 credits of their program, excluding electives, will have the notation "with Distinction" added to their transcript upon graduation.

INTERNATIONAL DEVELOPMENT INTERNSHIPS

INT 300 International Development Assistance Internship 3-0-0

Students must secure the approval of a Department and a faculty member in that Department to supervise an AUCC/Canada Corps Internship, a Champlain Regional College-Bishop's University Mai-Sot Internship, a Champlain Regional College Peru Internship or any other internship, sponsored by an NGO or accredited institution recognized by a Selection Committee, chaired by the Vice-Principal. Application for selection and funding must be addressed to the Vice-Principal's Office normally by December 1. The number of internships is subject to acceptance by sponsoring agencies and availability of funding.

Final-year students only or permission of Selection Committee.

ILT 104 Library Research Skills for the Social Sciences Lab 1-0-1

The objective of this laboratory course is to introduce students to the skills necessary to effectively complete their research assignments, including the correct use of library resources such as the online catalogue, periodical indexes and other relevant databases. Other areas of study include the identification of key terms for effective searching, productive use of the internet and the critical evaluation of retrieved resources. Academic integrity, plagiarism and the correct citation of print and online sources are also covered. Taught in conjunction with a research-based course, the specific resources relevant to research in the Social Sciences are introduced, and the students retrieve the material necessary to complete the essays for their particular course. The course is taught in the library's electronic classroom, and each week the students are given the opportunity for practical experience.

Economics

Studying Economics provides students with valuable skills that will serve them well in many careers. A BA degree in Economics allows graduates to pursue varied careers in areas such as economic forecasting, economic policy analysis, financial markets and institutions, and public policy. The undergraduate degree in economics also provides a basis for entry into graduate work in Economics, Finance, Business Administration, Law, Political Science, and Public Administration.

Economics is concerned with the fundamental principle upon which human activity revolves — our wants are unlimited while the resources available for their satisfaction are not. Any economic system must determine what is to be produced from these limited resources, and how the resulting output is to be distributed amongst its population. The human organization and economic machinery necessary for the resolution of this problem is a very complex matter, especially in a highly decentralized decision-making society such as our own private enterprise economy. The objectives of the discipline of economics are to explain how an economy works, how well it is performing, and how it may perform better. It may be noted here that economics is the only discipline within the Social Sciences where a Nobel Prize is awarded.

In addressing these concerns economics uses its own particular approach or manner of thinking. The goal of the Department of Economics is to develop in the student the capacity to "think like an economist". To achieve this objective requires that our students become familiar with disciplined economic reasoning and therefore familiar with the analytical tools of economic science. The process involves the development of both problem-solving and creative skills. These attributes, in turn, increase the understanding of present day economic phenomena as well as promoting effective predictions of the consequences of changes in our evolving world. The student is prepared for the present and forearmed for the future.

The breadth of programs available allows students to tailor their studies in line with their objectives. Choices may be made from the outline below in honours, major, minor, and joint programs such as Political Economy.

REGULATIONS APPLYING TO ALL PROGRAMS IN ECONOMICS

1. Admission

Rules and regulations for admission into degree programs in Economics are detailed in the section of this Calendar entitled "Admission and Registration" with the following additional specification:

a) Mathematics

- (i) MAT191 or MAT193 (or their equivalent) is a required course for all Economics programs except the Minor and B.A. (Major in International Political Economy).*
- (ii) MAT192 or MAT195 (or their equivalent) is a required course for B.A. (Honours Economics).

A student having a Québec Collegial Diploma (D.E.C.) including MAT NYA and MAT NYB may be exempted from MAT193 and MAT195. OAC Calculus, with 70%, is equivalent to MAT193. Students granted exemption must substitute these courses with free elective courses. Students lacking the appropriate preparation for MAT191 or MAT193 will be required to take an additional credit course MAT190.

**Note that MAT193 is a prerequisite for ECO208 and ECO212*

b) Statistics

Students are also required to have completed a course in Introductory Statistics, equivalent to EMA 140 as a prerequisite for all Economics programs. Students who are required to take EMA 140 will use this course as a free elective.

2. Transfers from Other Bishop's Programs

To be eligible to transfer into any Major or Honours program in Economics, including joint programs with Political Studies, from a non-Economics program, a student normally must have successfully completed at least 30 credits at Bishop's, and have achieved a minimum cumulative average of 65% based on all courses attempted, or an average of 65% in all Economics courses attempted (minimum of 12 credits).

3. Double Failure Rule

Any student who twice receives a failing grade in a course offered by the Department of Economics will not be permitted to repeat the course again. If this is a course that is required in order to graduate from a degree program offered by the Department of Economics, the student will not be eligible to graduate with that degree. This implies that having twice received a failing grade in the same economics course at Bishop's precludes a student from receiving transfer credits for the same course.

PROGRAMS IN ECONOMICS

I. B.A. (Honours Economics)

The Honours B.A. program in Economics consists of 90 credits. In order to register in the Honours program students must have completed at least 12 credits in ECO or EMA (Quantitative Methods) courses. In order to graduate with an Honours B.A. degree in Economics, students must maintain an average of at least 70% in all ECO and EMA courses. Requirements of the program are:

Quantitative Methods	9 credits
Mathematics	6 credits
Required courses in Economics	30 credits
Elective courses in Economics**	21 credits
Free Electives*	24 credits

Total	90 credits
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** For students in higher-credit programs, the number of credits in this category are adjusted accordingly. At least 12 credits in this category must be earned outside of the Department of Economics.*

*** Up to 9 of the total required credits in this category can be met, with departmental approval, by a selection of courses in cognate areas.*

Quantitative Methods

EMA141	Statistics for Economics II
EMA261	Econometrics I
EMA361	Econometrics II

Mathematics

MAT191	Enriched Calculus I
or	
MAT193	Calculus I for Business and Economics
MAT192	Enriched Calculus II
or	
MAT195	Calculus II for Business and Economics

Required courses in Economics

ECO102	Principles of Economics: Microeconomics
ECO103	Principles of Economics: Macroeconomics
ECO208	Intermediate Microeconomics I
ECO209	Intermediate Microeconomics II
ECO212	Intermediate Macroeconomics I
ECO213	Intermediate Macroeconomics II
ECO342	Advanced Macroeconomics
ECO343	Advanced Microeconomics
ECO360	Advanced Topics in Applied Economics
ECO370	Honours Thesis OR
ECO340	Practicum in Applied Economic Analysis and Policy

For those Economics Honours students who intend to proceed to graduate school, the following additional courses in Mathematics are strongly recommended:

MAT106	Advanced Calculus I
MAT107	Advanced Calculus II
MAT108	Matrix Algebra
MAT109	Linear Algebra
MAT213	Introduction to Probability
MAT214	Introduction to Mathematical Statistics

As well, it is strongly recommended that these students take additional courses in Mathematics as electives. Students should also consider a Minor in Mathematics.

II. B.A. (Major Economics)

The Major B.A. program in Economics consists of 90 credits. Requirements of the program are:

Mathematics and Quantitative Methods	9 credits
Required courses in Economics	15 credits
Elective courses in Economics*	21 credits
Free Electives**	45 credits
Total	90 credits

*Up to 9 of the total required credits in this category can be met, with departmental approval, by a selection of courses in cognate areas.

**For students in higher-credit programs, the number of credits in this category are adjusted accordingly. At least 15 credits in this category must be earned outside of the Department of Economics.

Mathematics and Quantitative Methods (9 credits)

MAT191 Enriched Calculus I

or

MAT193 Calculus I for Business and Economics

EMA141 Statistics for Economics II

EMA261 Econometrics I

Required Courses in Economics (15 credits)

ECO102 Principles of Economics: Microeconomics

ECO103 Principles of Economics: Macroeconomics

ECO208 Intermediate Microeconomics I

ECO212 Intermediate Macroeconomics I

ECO340 Practicum in Applied Economic Analysis and Policy

CONCENTRATIONS IN ECONOMICS

Students wishing to develop expertise in specific areas of Economics can elect to follow a concentration according to the following:

Concentration in Business Economics

Any six of the following:

ECO200 Money and Banking

ECO204 Labour Economics

ECO205 Industrial Organization

ECO217 International Economics

ECO270 Public Economics

ECO308 Managerial Economics

ECO245 Game Theory

With departmental approval, students can satisfy up to 6 of the 18-credit requirement from courses in Business

Concentration in Public Policy

Any six of the following

ECO126 Economics of Crime and Criminal Justice

ECO204 Labour Economics

ECO217 International Economics

ECO237 Economics of the Environment

ECO270 Public Economics

ECO336 Contemporary Economic Issues

ECO337 Ecological Economics

With departmental approval, students can satisfy up to 6 of the 18-credit requirement from courses in other disciplines

Concentration in Global Economy

Any six of the following:

ECO175 Economic Geography

ECO217 International Economics

ECO220 Economic Development I

ECO320 Economic Development II

ECO237 Economics of the Environment

ECO280 Contemporary Perspectives in Political Economy

ECO337 Ecological Economics

With departmental approval, students can satisfy up to 6 of the 18-credit requirement from courses in other disciplines

III. Minor in Economics

A minor in Economics consists of any 24 credits* in Economics including ECO102 and ECO103. Students considering a minor in Economics should consult the Chairperson of the Department. If Economics is required as a Cognate in another program, economics courses so taken will also be counted towards the minor. The course EMA141: Statistical Analysis for Business Decisions II can be included within the required 24 credits.

**Up to 3 of the total required credits in this category can be met, with departmental approval, by a selection of courses in cognate areas such as Business Administration, Mathematics, Computer Science, and Political Studies.*

JOINT PROGRAMS

I. Bachelor of Arts (Major and Honours) in International Political Economy

These programs are offered jointly by the Departments of Economics and Political Studies. As an area of academic inquiry, International Political Economy examines the relations between modes of production and distribution in the private and public spheres. Note that, in light of the impacts of globalization pressures on the political economies of the state, these programs have a decidedly international focus.

The B.A. Major Program in International Political Economy consists of at least 48 credits, with 24 credits drawn from Political Studies and 24 from Economics. The Honours program in International Political Economy consists of at least 60 credits, with 30 credits drawn from Political Studies and 30 from Economics.

To enter or continue in an Honours program, students must normally obtain and sustain a cumulative average of 70 % in the Political Studies and Economics courses. Honours students who do not fulfill the above requirements will automatically revert to the Major program. To be awarded Honours at graduation, students must be registered in the Honours program at Bishop's during their last thirty (30) credits of study. Honours standing at graduation will be determined by the students overall record in the Honours program.

(1) Major in International Political Economy (48 credits)

ECONOMICS REQUIREMENTS (24 CREDITS)

Required Courses in Economics (9 credits):

ECO 102 Principles of Economics: Microeconomics
ECO 103 Principles of Economics: Macroeconomics

One of the following courses:

ECO 251 History of Economic Thought I
ECO 270 Public Economics
ECO 280 Contemporary Perspectives in Political Economy

Elective Courses in Economics (15 credits):

The remaining 15 credits to be taken from any area of Economics

POLITICAL STUDIES REQUIREMENTS (24 CREDITS)

Required Courses in Political Studies (15 credits):

POL 100 Politics, Theory and Government
POL 101 Introduction to Modern Governments

Three of the following courses:

POL 235 American Political Economy
POL 317 Globalization and the Canadian State
POL 329 Classical Political Philosophy II
POL 334 Public Policy Analysis
POL 342 International Political Economy

Elective Courses in Political Studies (9 credits):

The remaining 9 credits to be taken from any area of Political Studies

(2) Honours in International Political Economy (60 credits)

ECONOMICS REQUIREMENTS (30 CREDITS)

Required Courses in Economics (15 credits):

ECO 102 Principles of Economics: Microeconomics
ECO 103 Principles of Economics: Macroeconomics
ECO 212 Intermediate Macroeconomics I

(please note that MAT191 or MAT193:

Calculus I is a prerequisite for this course)

ECO270 Public Economics

One of the following courses:

ECO 251 History of Economic Thought I
ECO 280 Contemporary Perspectives in Political Economy

Elective Courses in Economics (15 credits):

The remaining 15 credits to be taken from any area of Economics

POLITICAL STUDIES REQUIREMENTS (30 CREDITS)

Required Courses in Political Studies 1 (15 credits):

POL 100 Politics, Theory and Government
POL 101 Introduction to Modern Governments

Three of the following courses:

POL 235 American Political Economy
POL 317 Globalization and the Canadian State
POL 329 Classical Political Philosophy II
POL 334 Public Policy Analysis
POL 342 International Political Economy

The fourth and fifth courses in this section can count as required courses listed below.

Required Courses in Political Studies 2 (9 credits):

Two of the following courses:

POL 140 International Relations
POL 172 Introduction to American Politics
POL 214 Public Administration
POL 231 European Union
POL 232 Politics in Asia
POL 234 Politics of Africa
POL 241 International Affairs
POL 324 Marxian Political Thought
POL 330 Topics in U.S. Public Policy
POL 333 Internationalization of European Public Policy
POL 339 Political Development and Market Sentiments
POL 346 Politics of Global Finance

Plus:

One POL 400 level course

Elective Courses in Political Studies (6 credits)

The remaining 6 credits to be taken from any area of Political Studies

ECONOMICS COURSES

ECO102ab Principles of Economics: Microeconomics 3-3-0

A general introduction to the study of Economics and the nature of economic problems. Of primary concern is the behaviour of individual consumers and firms in particular markets, and the results of their actions as they appear in production, sales, costs, prices, wages, interest and profits.

ECO103ab Principles of Economics: Macroeconomics 3-3-0

A general introduction to the study of Economics and the nature of economic problems. The course is largely concerned with the determinants of the level of national income, employment and the accompanying stabilization problems — all in a Canadian context.

ECO109ab Introduction to Economic Policy 3-3-0

Economics is studied for its policy implications. This course will take the basic micro and macroeconomic models from ECO102 and ECO103 and elaborate on them, examining problems, policies, institutions, and controversies in public policy regarding the economy in Canada from both an analytical and a historical perspective.

Prerequisites: ECO102, ECO103

ECO115ab The Making of Economic Society 3-3-0

A non-technical introduction to the history of the development of the modern market economy, from its beginnings in Medieval Europe up to the Twenty-first Century. An exploration of the economic events, resources, institutions, ideas and technologies that have shaped the evolution of Western civilization and led to the westernization of the global economy.

Note: Not open to students with credit in ECO 122.

ECO118a	Canadian Economic Development I	3-3-0	ECO212a	Intermediate Macroeconomics I	3-3-0
A study of historical factors which have determined Canada's present economic structure, from the first penetration of European civilization into what is now the territory of Canada, to the dawn of the 20th century. Topics include the staple export industries (e.g. fur, fish, lumber, wheat, minerals, newsprint, energy), agriculture, changes in technology, state administration and policy, foreign investment. <i>Prerequisites: none. Not open to students with credit in Eco 120.</i>			This course examines business cycles, monetary and fiscal stabilization policies, unemployment and labour market frictions, inflation, exchange rate determination, exchange rate systems, and introduction to economic growth. <i>Prerequisites: ECO103 and MAT191 or MAT193 or equivalent.</i>		
ECO119b	Canadian Economic Development II	3-3-0	ECO213b	Intermediate Macroeconomics II	3-3-0
A study of historical factors of the 20th century which have shaped the development of the modern Canadian economy including staple industries, agriculture, energy, crown corporations and other financial and political institutions, federal-provincial relations, regionalism, industrial organization, technical change, foreign investment and transnational firms, international trade, and globalization. <i>Prerequisites: none. Not open to students with credit in Eco 120.</i>			An examination of economic growth, the microeconomic foundations of the basic aggregate demand and aggregate supply model, and various issues in macroeconomic policy. Topics to be covered include economic growth, consumption, investment, money demand and supply, the labour market, and fiscal, monetary, and exchange rate policies. <i>Prerequisites: ECO212, MAT195</i>		
ECO126ab	Economics of Crime and Criminal Justice	3-3-0	ECO217ab	International Economics	3-3-0
This course discusses the economic elements underlying the behaviour of criminals, victims, and law enforcement agencies. Major topics covered include the supply of crime by criminals, the demand for crime prevention by victims, and public policy issues like crime control, and the allocation of criminal justice resources.			The course provides an introduction to international economics. The first half of the course examines trade theory and policy, including the Classical and modern theories of international trade, policies restricting trade, and international trade liberalization. The second half of the course examines international monetary economics, including foreign exchange markets, exchange rate determination, and open-economy macroeconomic policy. <i>Prerequisites: ECO 102 and ECO 103</i>		
ECO175ab	Economic Geography	3-3-0	ECO220ab	Economic Development I	3-3-0
The production of, and trade in, goods and services vary by city, region, and country. In recent years, these spatial variations have widened in some cases, and narrowed in others. But common to all are the drivers-of-change. These include major geo-political events, the adoption of innovative cost-saving practices, and the creation and evolution of entrepreneurial networks and industrial clusters. This course will explore the key elements of these dynamics, and explore the ongoing debate about the appropriate role of government in an increasingly-globalized world. <i>This course is cross-listed with ESG 175.</i>			An introduction to the concept of economic development and models of economic growth. An analysis of domestic problems facing developing countries: poverty and inequality, population growth, education, rural development, unemployment, the environment, and the reform of financial systems. <i>Note: Not open to students who have taken ECO 330 and/or ECO 331</i> <i>Prerequisites: ECO 102, ECO 103</i>		
ECO200ab	Money and Banking	3-3-0	ECO237ab	Economics of the Environment	3-3-0
Nature and functions of money and credit, financial institutions, commercial and central banking in the Canadian economy. Aims, instruments, and effectiveness of monetary policy. <i>Prerequisite: ECO103</i>			Application of concepts and methods of economic analysis to environmental problems. Pros and cons of selected policies for environmental protection. Economic growth and environmental decay. Private vs social costs of environmental decay. <i>Prerequisites: ECO102, ECO103</i> <i>Cross-listed with ENV267</i>		
ECO204ab	Labour Economics	3-3-0	ECO245ab	Game Theory with Applications to Economics	3-3-0
An analysis of the demand for and the supply of labor, wage differentials, and wage structures, as well as an analysis of the effects of unions, and the rationale for current supply-side or passive employment policies in Canada and other OECD countries. <i>Prerequisites: ECO102, ECO103</i>			Game Theory studies the causes and consequences of the actions of decision-makers who are aware that their choices affect each other. The theory includes: non-cooperative games, cooperation and reputation, and dynamic games. Applications include: bargaining, auctions, industrial organization, asymmetric information, and social choice theory (the economics of democratic institutions). <i>Prerequisites ECO208</i>		
ECO205ab	Industrial Organization	3-3-0	ECO251a	History of Economic Thought I	3-3-0
An analysis of the behavior of firms in the market place. The conduct and performance of firms based on the efficiency and profitability criteria. Behavior of firms facing different market structures in terms of their pricing strategies, quantity decision, and product choice under a strategic environment are analyzed using examples of the structure of certain industries. The policy/regulatory environment faced by firms in the global market, the impact of Canadian public policy on industry structure and firm performance are also discussed. <i>Prerequisites: ECO102</i>			An introductory analysis of the methodological foundations of the more prominent schools of thought within mainstream Economics. This is a seminar course, and students are required to prepare one or more essays. <i>Prerequisite: ECO102, ECO103</i>		
ECO206ab	Agricultural Economics	3-3-0	ECO260ab	Topics of Applied Economics	3-3-0
Application of microeconomics principles to the problems of agricultural production and resource use, agricultural supply and demand analysis, price determination, market structure and income distribution in competitive and imperfectly competitive markets. <i>Prerequisites: ECO102, ECO103</i>			Content of this course varies year by year. The topics are determined by the instructor of the course. A writing component is emphasized in this course. <i>Prerequisite: ECO102, ECO103</i>		
ECO208a	Intermediate Microeconomics I	3-3-0	ECO270ab	Public Economics	3-3-0
Consumer theory, production and cost theory, output and price determination by market structures, introduction to game theory, general equilibrium analysis, choice under uncertainty and imperfect information. <i>Prerequisites: ECO102, and MAT191 or MAT193 or equivalent.</i>			This course examines key policy issues related to government expenditure and taxation. Topics covered include the rationale for government provision of goods in a market economy, public choice, fiscal federalism, cost-benefit analysis, and an analysis of tax incidence and efficiency. <i>Prerequisites: ECO102</i>		
ECO209b	Intermediate Microeconomics II	3-3-0	ECO280ab	Contemporary Perspectives in Political Economy	3-3-0
Consumer Theory, Decision Theory under Risk and Uncertainty, Information, and Microeconomic applications. <i>Prerequisites ECO208, MAT195</i>			This course develops core contemporary perspectives in political economy within an international context. This course is neither a course in politics nor a course in economics, but rather a course that stresses the interaction of the two disciplines. <i>Prerequisites: ECO102 and ECO103</i>		
ECO210ab	Economics and the Law	3-3-0	ECO308ab	Managerial Economics	3-3-0
An introduction to the application of economic principles and methodology to a variety of legal problems with particular emphasis on the theory of property rights and the allocation of resources. Problems under imperfect information, such as the principal-agent problem, the "market for lemons," job market signaling and screening, are also discussed. <i>Prerequisite: ECO 102</i>			An introduction to the principal topics in managerial economics. These include decision-making under uncertainty, demand analysis and estimation, cost analysis and estimation, and pricing theory and practices. <i>Prerequisites: ECO208, EMA141</i>		

ECO310 Economics Internship 3-0-0
The Economics Internship provides an opportunity for a continuing student to gain valuable experience working alongside professional economists. The internship is subject to acceptance and supervision by the Department of Economics and by the participating institution. The participating institution can be located outside of the Lennoxville/Sherbrooke community, and thus may require the student to reside in another city. The internship takes place over some or all of the summer months. Funding for the internship is provided in the sum of \$5000.

ECO320ab Economic Development II 3-3-0
An analysis of international issues facing developing countries: international trade and trade policy, foreign investment and foreign aid, the balance of payments, and third world debt. The techniques of evaluating development projects.
Note: Not open to students who have taken ECO 330 and/or ECO 331
Prerequisites: ECO208, ECO212

ECO336ab Contemporary Economic Issues 3-3-0
Application of tools of economic analysis to selected issues and problems in Canada.
Prerequisites: ECO102 and ECO103

ECO337ab Ecological Economics 3-3-0
This course explores the principles underlying a truly sustainable ecological economy in a "full world". Topics such as sustainability, the nature of work, quality in production and consumption, ecological cost, peak oil, inequality, the scale and distribution of economic activity, and the purpose of economic activity and economic development are entertained. Seminar course in which student presentations feature prominently. Intended for students who have completed at least 45 credits at the university, including at least 12 in economics.
Prerequisites: ECO102 and ECO103
Cross-listed with ENV377

ECO340ab Practicum in Applied Economic Analysis and Policy 3-0-0
Under the supervision of a faculty member of the Department of Economics, small groups of students in the final year of the Major or Honours program will complete two mini projects on recent economic issues and present their research in a seminar. Students will also meet regularly throughout the semester to discuss economic events and issues and participate in discussions.
Prerequisites: ECO208, ECO212, and EMA261

ECO342ab Advanced Macroeconomics 3-3-0
Selected topics in theoretical and applied macroeconomics, including growth theory, real business cycles, new Keynesian models of fluctuations, consumption, investment, unemployment, monetary policy, and fiscal policy. Tutorial.
Prerequisites: ECO213, EMA261 (EMA 261 can be taken concurrently)

ECO343ab Advanced Microeconomics 3-3-0
A selection of core topics from Microeconomics, including unconstrained and constrained optimization, direct and indirect utility functions, duality in consumption and production, the expenditure function, ordinary and compensated demand functions, the Slutsky equation, the Envelope Theorem, Roy's Identity, Hotelling's Lemma, and the Expected Utility Hypothesis.
Prerequisite: ECO209, EMA 261 (EMA 261 can be taken concurrently)

ECO344 Independent Study 3-0-0
Individual study and research under the guidance of an advisor.
Prerequisites: Permission of the Department and instructor. ECO208, ECO212

ECO345 Independent Study 3-0-0
Individual study and research under the guidance of an advisor.
Prerequisites: Permission of the Department and instructor. ECO208, ECO212

ECO351b History of Economic Thought II 3-3-0
An advanced analysis of the methodological foundations of the more prominent schools of thought within mainstream Economics. This is a seminar course, and students are required to prepare one or more essays.
Prerequisite: ECO102 and ECO103, and ECO251

ECO360a Advanced Topics in Applied Economics 3-3-0
Content of this course varies year by year. The topics are determined by the instructor of the course. A writing component is emphasized in this course.
Prerequisite: ECO208, ECO212, EMA 261 (EMA 261 can be taken concurrently)

ECO370ab Honours Thesis 3-0-0
Continuation of ECO360. Under the supervision of a faculty member of the Department of Economics, the student in the final year of his Honours program will complete the research agenda developed in ECO360. The student will present the research results in a seminar to be scheduled in the last two weeks of class.
Prerequisite: ECO 360

Mathematics

EMA140ab Statistics for Economics I 3-3-0
This course is cross-listed with BMA140 and is not open to students with credit for BMA140. Topics include: data summarization: frequency distributions, measures of central tendency and variability; probability; introduction to statistical decision analysis; discrete probability distributions: binomial, Poisson and hypergeometric probability distributions; continuous probability distributions: normal, uniform and exponential probability distributions.

Prerequisite: MAT 195ab or equivalent (can be taken concurrently)
Note: this course may not be taken for credit by Science students.

EMA141ab Statistics for Economics II 3-3-0
This course is cross-listed with BMA141 and is not open to students with credit for BMA141. Topics include: Sampling methods and sampling distributions; statistical inference; estimation and hypothesis testing; simple linear regression and correlation; multiple and curvilinear regression; chi-square tests for independence and goodness-of-fit; introduction to analysis of variance; nonparametric tests.
Prerequisite: EMA140 or equivalent
Note: this course may not be taken for credit by Science students.

EMA261ab Econometrics I 3-3-0
An introduction to econometrics. Topics include the classical assumptions, ordinary and generalized least squares estimation, hypothesis testing, the statistical implications of violating of the classical assumptions, common remedial measures, and the distributed lag and autoregressive models.
Prerequisite: ECO102, ECO103, BMA141, EMA141 or equivalent

EMA262ab Mathematical Economics I 3-3-0
The application of matrix algebra and multivariate calculus to model-building and problem-solving in Economics.
Prerequisites: ECO102, ECO103, and any one of MAT 192 or MAT195
Cross-listed with MAT172

EMA361ab Econometrics II 3-3-0
Ordinary and generalized least squares estimation, and hypothesis testing, using matrix algebra. Additional topics include simultaneous-equation estimation, the identification problem, two-stage least squares estimation, a stationary series, the unit-root test, spurious regression, the Granger causality test, cointegration, and the error-correction model.
Prerequisites: EMA261, ECO208, ECO212

EMA362ab Mathematical Economics II 3-3-0
The application of differential and difference equations, and mathematical programming, to model-building and problem-solving in Economics.
Prerequisites: EMA261, ECO208, ECO212

Cognate Courses

A number of cognate courses may be taken in such areas as Business Administration, Mathematics, Computer Science, Environmental Studies and Geography and Political Studies. Consult the Chairman of the Department for the full range of possibilities.

Environmental Studies and Geography

The Environmental Studies and Geography Department offers a wide variety of courses focusing mainly on the academic area of Environmental Studies. The intention is to provide students with the systematic elements essential for an understanding of environmental impacts, policy, history and thought. It is possible for students to develop their interests in three areas: the physical processes underlying environmental systems; the human impacts on these systems, including policy creation; or the history and philosophy of environmental issues, especially ethical perspectives. In order for a complete understanding of the impacts people are having on their environment, whether they be at a local, regional or global scale, we must understand the how and why the environment is changing.

Global warming, acid precipitation, ozone depletion, waste management and water conservation are issues which require thorough examination in order that proper decision-making processes can be implemented by leaders in government, industry and non-governmental organizations. We carefully and systematically examine all aspects of the environment so that our graduates can play an important role in the future of our environment.

A degree in Environmental Studies and Geography often leads to degrees in higher education, including an M.A. and/or Ph.D. It is also a sound basis for a career in law and/or politics, teaching, journalism, environmental consulting or government service. Former graduates have been very successful in attaining admission to Graduate and Law Schools, and obtaining employment in various occupational fields related to the environment.

Bishop's location in the midst of an area of great economic, cultural and physical diversity provides many opportunities for students to take part in practical fieldwork and applied projects. Such studies are integral parts of several courses, especially those relating to elements of physical geography and human impact on the environment. Students enrolling in ESG courses should be prepared to devote time to fieldwork outside of normal class time. Details of field studies will be discussed within individual courses.

The Eastern Townships Collection of the Bishop's University Library provides an important source of research materials for local area studies dealing in particular with the geography of southern Quebec.

The Program

Areas of Concentration

Students **must** register in **either** the Environmental Studies Concentration **or** the Geography Concentration. The details of the concentrations are given below:

A) Environmental Studies Concentration

48-credit Major

1. Core Required Courses 11 courses 33 credits

Students must take **all** of the following courses, preferably in the annual sequence noted:

Year 1:

ESG 100 Introduction to Environmental Studies
ESG 126 Introduction to Human Geography
ESG 127 Introduction to Physical Geography
MAT 190 Precalculus Mathematics

ELA 116 Effective Writing **or**
a University-level English Literature 3-credit course

Year 2:

ESG 260 Research Methods
ESG 262 Introduction to Geographic Information Systems
ESG 224 Human Impact on the Environment
ESG 267 Global Environmental Change: a physical perspective

One of the following quantitative analysis courses:

ESG 261, BMA 140, EMA 140, PMA 160 or PHY 101

Year 3:

ESG 300 Environmental Studies Seminar

2. Additional Required Courses 5 courses 15 credits

Students must complete 5 courses from **one** of the three following lists (laboratory credits do not count toward the total credits required):

a) Environmental Impact and Policy:

ESG 175 Economic Geography
ESG 212 Urban Geography
ESG 227 Oceans II
ESG 249 Resource Management
ESG 264 Outdoor Recreation
ESG 266 Environmental Policy
ESG 339 The Canadian Arctic
ESG 340 The Circumpolar North
ESG 348 Urban Planning
ESG 349 Watershed Management
ESG 350 Environmental Justice
ESG 354 Environmental Impact Assessment
ESG 358 International Environmental Issues
ESG 362 Advanced Geographic Information Systems
ECO 103 Macroeconomics
ECO 102 Microeconomics
ECO 237 Economics of the Environment
POL 101 Introduction to Modern Governments
POL 214 Public Administration
POL 334 Public Policy Analysis
PBI 241 Evolutionary Psychology
PSY 293 Multicultural Psychology
SOC 322 Urban Sociology
SOC 381 Media and the Environment

b) Science and the Environment

ESG 226 Oceans I
ESG 227 Oceans II
ESG 250 Geomorphology
ESG 251 Soils and Vegetation
ESG 265 The Atmosphere and Weather
ESG 269 Earth's Crust
ESG 361 Glacial Environments
ESG 362 Advanced Geographic Information Systems
ESG 363 Natural Hazards
ESG 364 Field Course in Geography
ESG 365 Mid-latitude Weather Systems
ESG 367 Climate Change
BIO 115 General Zoology
BIO 116 General Botany
BIO 117 General Ecology
BIO 191 Introductory Biology
BIO 217 Advanced Ecology
BIO 221 Biogeography
MAT 191 Enriched Calculus I
PHY 191 Introductory Physics I
CHE 191 General Chemistry I
CHE 133 Environmental Chemistry

c) Environmental History and Thought:

ESG 162	Canada: A Nation of Regions
ESG 163	Introduction to Landscape and Cultural Geography
ESG 211	Historical Geography of the Eastern Townships
ESG 268	Human Landscape and Environmental Change
ESG 339	The Canadian Arctic
ESG 340	The Circumpolar North
ESG 353	Landscape
ESG 366	Ethical Perspectives on Environmental Problems
ENG 118	Literature of the Environment
HIS 104	The Development of the West
HIS 105	The 20th Century World
HIS 211	Canada Since 1945
PHI 140	Introduction to Ethics
PHI 240	Topics in Business Ethics
PHI 245	The Philosophy of Science
PHI 246	Philosophy of Art
REL 100	Introduction to Religion I
REL 101	Introduction to Religion II
REL 322	Phenomenology of Religion
SSA 109	Introduction to Anthropology
SSA 207	North American Natives

3. Honours Requirements:**90-credit program, 60-credit Honours**

Same Required courses as for the Major, plus:

ESG 461a Honours Research Proposal

ESG 462b Honours Thesis

Six additional ESG credits, for a total of 60 ESG credits.

A minimum of 70% overall average

Note: *Some of the required courses listed may have one or more prerequisites. It is the student's responsibility to ensure these prerequisites are completed; these completed prerequisites may be counted as Electives.*

B) Geography Concentration

1. For a Major, the student must take at least 45 credits in Environmental Studies and Geography. Honours and Majors students must complete ESG126a, 127b, 260a and 261b.

2. Honours Requirements:

Honours in the Geography Concentration requires at least 60 credits in Environmental Studies and Geography, including ESG 461a and ESG 462b. The Honours program requires a minimum 70% average and permission of the Department.

Departmental regulations of particular note include:

ESG 126 and ESG 127 are normally prerequisites for all upper-year courses.

Departmental Minors:**Environmental Studies Minor**

The Environmental Studies Minor encompasses the study of several major natural systems including the atmosphere, the hydrosphere and the lithosphere, as well as the effects of human activities on the three systems. The program is intended to provide students with an interdisciplinary approach to the natural environment, an approach

that is embedded in the Liberal Arts and Science tradition of Bishop's University. The objectives of the program are not only to equip students with the scientific knowledge of their environment, but also to enrich this knowledge with a study of the social, political and policy aspects necessary to effectively analyse complex environmental systems.

The Environmental Studies Minor consists of the following four required courses:

ESG 100 Introduction to Environmental Studies

ESG 126 Introduction to Human Geography

ESG 127 Introduction to Physical Geography

ESG 224 Human Impact on the Environment

In addition, students must take four more ESG courses for a total of 8 courses, 24 credits, from the Department of Environmental Studies and Geography.

Geography Minor

The Geography Minor consists of two required courses, ESG 126 and ESG 127 plus six additional ESG courses for a total of 24 credits from the Department of Environmental Studies and Geography.

Note: In keeping with the new Departmental name, as of the 2001-2002 academic year all Departmental course codes are changed from GEO to ESG. Since the course numbers, descriptions and content remain the same, GEO and ESG courses with the same course number are treated as the same course under all University Calendar rules and regulations.

ESG 100 Introduction to Environmental Studies 3-3-0

An introductory approach toward understanding the global environment and the human impact on this environment. Topics covered include processes operating in natural systems, the identification of problems caused by human interaction with these systems, solutions to these problems and the implementation of possible solutions.

ESG 126 Introduction to Human Geography 3-3-0

An introduction to the field of human geography; its scope and methods. The aim is to focus on the relationship between people and their environment, including population trends, resource use, political and economic forces and urban planning.

ESG 127 Introduction to Physical Geography 3-3-0

An introduction to the principles and methods of climatology and geomorphology. Topics discussed include Earth's radiation balance, atmospheric wind systems, major climate types, and the work of geomorphic agents, such as water and wind, on the development of physical landscapes.

ESG 162 Canada: A Nation of Regions 3-3-0

This course examines Canada's evolving regional geography through an exploration of the natural, social, political, cultural and economic forces involved in creating a distinctly Canadian landscape. The course divides Canada into various regions: The Atlantic Region, St. Lawrence-Great Lakes Lowlands, The Canadian Shield, The Western Interior, British Columbia and The North in an effort not only to understand the vast differences within Canada, but also to deepen our understanding of Canada as a whole.

ESG 163 Introduction to Landscape and Cultural Geography 3-3-0

Cultural geography is concerned with making sense of people and the places that they occupy, an aim that is achieved through analysis and understandings of cultural processes, cultural landscapes and cultural identities. This course explores contemporary cultural geography and landscape studies by applying and evaluating - at different scales - the concepts of cultural diffusion, cultural region, cultural ecology and cultural landscape. Particular attention will be placed on interpretations of how cultural spaces are constructed, contextualized and conserved.

ESG175 Economic Geography 3-0-0

The production of, and trade in, goods and services vary by city, region, and country. In recent years, these spatial variations have widened in some cases, and narrowed in others. But common to all are the drivers-of-change. These include major geo-political events, the adoption of innovative cost-saving practices, and the creation and evolution of entrepreneurial networks and industrial clusters. This course will explore the key elements of these dynamics, and explore the ongoing debate about the appropriate role of government in an increasingly-globalized world.

This course is cross-listed with ECO 175.

ESG 211 Historical Geography of the Eastern Townships 3-3-0

A retrospective approach to the Eastern Townships blending history and landscape. Various themes will be presented to examine the principle elements of landscape change during the 19th and 20th centuries in relation to the spread of the agricultural frontier, the changing cultural geography of the region, and the introduction of the area as a recreational retreat.

ESG 224 Human Impact on the Environment 3-3-0

Changing environmental relationships in the modern context of population growth and technological advance. The human impact on the world's atmosphere and climate, water, land and soils, vegetation, and animal life.

Prerequisite: ESG 100 and ESG 126

ESG 226 Oceans I 3-3-0

An introduction to physical, geological and chemical oceanography. Topics to be covered include: the history of oceanography, the origin of the ocean basins, marine sediments, seawater properties, ocean climates, waves, tides and other physical characteristics of the coastal margins.

Prerequisite: ESG 127 or permission of the Instructor

ESG 227 Oceans II 3-3-0

An introduction to the interaction between the oceans and society at large. Topics will include: marine organisms of economic value, food and mineral production from the oceans, coastal development, marine pollution, ocean lifestyles and legal problems concerning the use of the oceans.

Prerequisite: ESG 226a (Oceans I) or ESG 127

ESG 249 Resource Management 3-3-0

This course examines the interactions between natural and social processes in the development, use and conservation of natural resources. Theories and concepts explored are: integrated resource management, ecosystem management, adaptive management and the role of public participation. Case studies explore trends in forestry, fisheries, agriculture, mining, wildlife and water management.

Prerequisites: ESG 100

ESG 250 Geomorphology 3-3-0

Selected topics in geomorphology with particular emphasis on fluvial processes and land forms of southern Quebec. Aspects of applied physical geography may be covered. Fieldwork is an integral part of this course.

Prerequisite: ESG 127

ESG 251 Soils and Vegetation 3-3-0

The systematic examination of the development and distribution of the major soil and vegetation types of the world and of the ways in which these elements of the physical environment have become resources subject to varying utilization patterns.

Prerequisite: ESG 127

ESG 260 Research Methods 3-3-0

An introduction to research methodology and its application to environmental studies and geography. Course modules include research design, hypothesis testing, sampling techniques, interview techniques, archival techniques and other approaches to primary and secondary data gathering.

Prerequisite: ESG 126 and ESG 127

ESG 261 Quantitative Methods 3-3-0

Quantitative methods in environmental studies and geography; the nature of explanation; problems of observation and data collection; descriptive statistical analysis; inferential statistical analysis.

Prerequisite: ESG 126 and ESG 127

ESG 262 Introduction to Geographic Information Systems 3-3-0

An introduction to geographic information systems including cartographic concepts, basic remote sensing (aerial photography and digital imagery), vector and raster digital spatial data models, data input and editing, database management, structured query language, and elementary spatial analysis.

Prerequisites: ESG 126 and 127; Open only to ESG students in the Environmental Studies Concentration

ESG 264 Outdoor Recreation 3-3-0

This course examines: (i) theories and concepts concerning the recreational use of natural settings (the human dimensions), (ii) the nature, capabilities and limitations of natural settings (the natural dimensions) and, (iii) the institutional arrangements which exist to manage outdoor recreation settings (the management dimensions), including the role of national parks and protected areas.

Prerequisite: ESG 100 or ESG 126

ESG 265 The Atmosphere and Weather 3-3-0

A comprehensive description of the principal characteristics of Earth's atmosphere including air temperature, density, pressure and moisture; the development of clouds, wind and precipitation, and physical explanations of weather events such as mid-latitude cyclones, thunderstorms and hurricanes.

Prerequisite: ESG 127 or permission of the Instructor

ESG 266 Environmental Policy 3-3-0

An introduction to the field of environmental policy, with an emphasis on the regulation of technological hazards. Consideration will also be given to different approaches to environmental policy, including "command-and-control" regulation and enforcement as well as the emergence of market incentives and voluntary initiatives. Topics will include: air quality, water quality, solid and hazardous waste, toxic substances, pollution-prevention and environmental assessment.

Prerequisite: ESG 224a or permission of instructor

ESG 267 Global Environmental Change: a physical perspective 3-3-0

An examination of the general trends and concepts associated with global environmental change using a physical geographic approach. This includes analysis of the complex interlinkages of the atmosphere-ocean-terrestrial-biosphere systems, of environmental changes during the Quaternary Period, and of the environmental issues associated with these changes. The human response to global environmental change will be covered in less detail.

Prerequisite: ESG 100 and ESG 127

ESG 268 The Human Landscape and Environmental Change 3-3-0

This course uses various aspects of environmental change to identify links between the sciences and the humanities. A convergence of these two conceptual approaches can provide a more holistic understanding of the long-term processes impacting both human and physical environments. How different cultures conceptualise their relationships with the physical environment is central to how environmental management decisions are made.

Prerequisite: ESG 100, ESG 126, ESG 162 or ESG 163

ESG 269 The Earth's Crust 3-3-0

The course is a general study of the materials and dynamics of Earth's crust. Included are geologic and topographic maps, geological time scales; an examination of minerals and fossils, igneous, metamorphic and sedimentary rocks; discussion of processes such as: sedimentation, vulcanism, plutonism, deformation and seismology; and, an introduction to plate tectonics, orogenies

Prerequisite: ESG 127

ESG 300 Environmental Studies Seminar 3-3-0

Selected topics in Environmental Studies will be examined. The course allows detailed study of particular areas of environmental research through student-led seminars and general class discussion.

Prerequisites: ESG 224 and 267; open only to U3 ESG Honours and Majors in the Environmental Studies Concentration

ESG 339 The Canadian Arctic 3-3-0

The ecology of traditional Eskimo occupancy; socio-economic change through contact with explorers, whalers, traders, missionaries, and administrators. Demographic centralization; industrial development; nunamiut and kabloonamiut; frontier or homeland? The outlook for renewable resources. Problems of sovereignty over arctic space.

Prerequisite: ESG 100, ESG 126, ESG 162 or ESG 163

ESG 340 The Circumpolar North 3-0-0

An introduction to the physical and cultural geography of the Circumpolar North. This course will focus upon the cultural and political ecology of the human population in this region. The emphasis will be upon the contexts of human life and human experience in the North. This course also includes discussions of the northern landscape: nunamiut and kabloonamiut; demographic centralization; challenges to sovereignty over arctic space. The emphasis will be on lectures and class participation. There will be time set aside to discuss lecture topics and to add concerns of interest to the students; class participation is highly encouraged.

Prerequisite: ESG 100, ESG 126, ESG 162 or ESG 163

ESG 346 Independent Study I 3-0-0

Open to U3 majors and honours students at the discretion of the Department.

ESG 347 Independent Study II 3-0-0

Open to U3 majors and honours students at the discretion of the Department.

ESG 348	Urban Planning	3-3-0
Consideration of several aspects of the city planning process: the legal basis of planning, the official Plan, zoning, transportation, planning procedure and implementation, the goals of planning.		
<i>Prerequisite: ESG 126 or permission of the instructor.</i>		
ESG 349	Watershed Management	3-3-0
This course examines integrated watershed management, including assessment of bio-physical freshwater systems, implications of natural resource development and land use on water quality and quantity, as well as institutional arrangements and the role of stakeholder involvement in watershed-scale decision-making. Field studies in the St. Francis River Watershed.		
<i>Prerequisite: ESG 249</i>		
ESG 350	Environmental Justice	3-3-0
An introduction to the field of environmental justice, with an emphasis on fairness and equity in environmental management. The course will examine the history of activism and the development of theoretical work and empirical evidence regarding the connections between race, class and the environment.		
<i>Prerequisite: ESG 224a or permission of instructor</i>		
ESG 353	Landscape	3-3-0
This course explores landscapes as products of interacting physical and human processes, and examines how those processes can change landscapes over time. The course uses an integrated approach to examine and interpret contemporary landscapes and reconstruct landscapes of the past, and highlights the utility of landscape science for environmental management applications. The course will be conducted through lectures and student-led seminars.		
<i>Prerequisite: ESG 126 and ESG 127</i>		
ESG 354	Environmental Impact Assessment	3-3-0
Environmental impact assessment (EIA) is intended to provide a basis for deciding whether and how to proceed with a proposed resource development project so as to prevent or minimize environmental degradation. This course will examine the theory, methods, regulatory frameworks and social implications of EIA with emphasis on recent Canadian case studies.		
<i>Prerequisite: ESG 249</i>		
ESG 358	International Environmental Issues	3-3-0
Environmental factors and their impact on global agricultural production, population growth and distribution. Fresh water and its effect on socio-economic development and political stability. Issues in trans-boundary pollution are discussed. Case studies from developed and developing countries.		
<i>Prerequisite: ESG 224a or permission of the instructor.</i>		
ESG 361	Glacial Environments	3-3-0
The study of processes in glaciated environments. Particular emphasis will be placed on the effects of past glaciations on the Canadian landscape and on the action of contemporary Canadian glaciers. Arctic and alpine environments provide many excellent examples of these processes.		
<i>Prerequisite: ESG 250a or permission of instructor.</i>		
ESG 362	Advanced Geographic Information Systems	3-3-0
Project-based applications stress the utility of advanced GIS analysis in environmental studies and geography.		
<i>Prerequisite: ESG 262</i>		
ESG 363	Natural Hazards	3-3-0
The course is an examination of the occurrence, nature and explanation of hazardous natural processes. Attention will be given to defining natural hazards, describing their physical characteristics and discussing the human response to these events. Geological hazards, such as earthquakes, floods and volcanoes, and climatological hazards, such as hurricanes, tornadoes and blizzards, will be studied.		
<i>Prerequisite: ESG 250a, ESG 269 or ESG 265</i>		
ESG 364	Field Course in Geography	3-0-0
The course will introduce students to field techniques and data collection and analysis in human and physical Geography. Data collection will take place during a week-long field camp held the week prior to the beginning of Fall Semester classes. During the semester students will meet weekly with a faculty advisor to discuss the Field Course Report. Final submission and oral presentation of the Report will occur at the end of the semester. A field camp fee will be assessed.		
<i>Prerequisite: Open to U3 majors and honours students at the discretion of the Department.</i>		

ESG 365	Mid-Latitude Weather Systems	3-3-0
Examination of several of the major factors in mid-latitude cyclones including: air masses, upper and middle atmospheric structure, baroclinic instability, vorticity, divergence and geostrophic flow. Discussion of normal and extreme weather events such as blizzards, thunderstorms, extra-tropical cyclones, tornadoes and Nor'easters. An introduction to weather forecasting and weather on the internet.		
<i>Prerequisite: ESG 265</i>		
ESG 366	Ethical Perspectives on Environmental Problems	3-3-0
An introduction to the major philosophical traditions in the field of environmental ethics: natural law, utilitarianism, virtue theory and deontology. The use of case studies in environmental problems, e.g. ocean dumping, nuclear wastes, air pollution, greenhouse gases, etc., as a way of exploring several contemporary positions such as biocentrism, ecocentrism, the land ethic and deep ecology.		
<i>Prerequisite: ESG 126 and ESG 127</i>		
ESG 367	Climate Change	3-3-0
The course examines the debate surrounding global climate change with climatic and paleo-climatic perspectives. The climate system's natural variability, and predicted impacts and environmental implications are examined. The course will include a short review of the present climate system, and a section on the Holocene climate. We will also examine how predictive climate models are developed and tested against recent and Holocene paleo-climatic data.		
<i>Prerequisite: ESG 267</i>		
ESG 370	Special Topics in Environmental Studies and Geography	3-3-0
A lecture/seminar course offered by regular and visiting faculty on environmental/geographical topics related to their research interests. Topics are determined by the instructor therefore content of the course varies year by year. The course will be offered on an occasional basis.		
<i>Prerequisite: Open only to U3 Honours and Majors in Environmental Studies and Geography.</i>		
ESG 461a	Honours Research Proposal	3-0-0
An introduction to the planning, execution and reporting of Environmental and Geographic research. The student is required to select an appropriate research project and, under the supervision of a faculty member, complete a formal research proposal. The proposal must include a detailed Introduction, including the purpose, objectives and research hypothesis, a detailed Conceptual Background, with associated Literature Review and Bibliography, and a description of the Research Methods and Data Collection Techniques to be used in the project. Preliminary data collection should also take place. The Proposal will be presented at a Departmental seminar to be scheduled during the last two weeks of classes.		
<i>Prerequisite: Permission of Department</i>		
ESG 462b	Honours Thesis	3-0-0
The continuation of ESG 461. Information and data collected for the Honours Research Proposal, plus additional data collected will be analysed, discussed and presented in an Honours thesis. Research findings will be presented at a Departmental seminar to be scheduled during the last two weeks of classes; the final submission of the thesis must occur before the last day of the formal examination period. The completion of both ESG 461 and ESG 462 is necessary to satisfy the requirements for Honours in Environmental Studies and Geography.		
<i>Prerequisite: ESG 461 and permission of the Department</i>		

Political Studies

The Department of Political Studies offers the following programs of study: Honours, Major and Minor in Political Studies; Minor in Public Administration and Public Policy; Major and Minor in International Studies; Honours and Major in International Political Economy.

CREDIT REQUIREMENTS FOR PROGRAMS OFFERED BY THE DEPARTMENT OF POLITICAL STUDIES

PROGRAM	Honours*	Major	Minor
Political Studies	60	48	24
Public Administration and Public Policy	X	X	24
International Studies**	X	48	24
International Political Economy***	60	48	X

* **Grade requirements** – *To enter or continue in an Honours program, students must normally obtain and sustain a cumulative average of 70%. Honours students in Political Studies must also maintain a satisfactory pattern of performance in all of their Political Studies courses, and should not receive grades below 70% in more than one quarter of their Political Studies credits*

** **Grade requirements** – *International Studies Major and Minor students will normally be required to spend a semester at one of the many universities abroad with which Bishop's has an exchange program. Students must normally maintain a 70% average to be eligible for the exchange program*

*** *Offered jointly by the Department of Economics and Political Studies*

POLITICAL STUDIES – PROGRAMS AND REQUIREMENTS

Political Studies provides students with a working knowledge of society and how decisions are made. Governments, politicians, leaders in private industry and ordinary individuals function within a framework of accepted political norms, e.g. notions of justice, freedom, rights and duties. Over time, these received norms are challenged by conventional methods such as voting, political parties, interest group lobbying and protest movements; or the challenge may be by militant or revolutionary means such as radical Marxism, fascist organizations or discrete acts of terrorism. Political Studies systematically examines and presents these phenomena.

Knowing the political system increases one's capacity for choice. Therefore, a knowledge of Canadian, provincial or local politics presents the student with greater opportunities and advantages within his or her society. Political Studies also explores other political systems, e.g. the American presidential system, the European Union, communist and post-communist political systems and the impact of the new states on the emerging political economy of a new international order. The discipline allows for a critical evaluation of society and its institutions through a study of the history of political theory; in addition, the student may engage in a problem solving approach through empirical policy research using survey methods.

A degree in Political Studies may lead to further specialization, e.g. an M.A. in a one-year program, or a Ph.D. It is also a preparation for professional studies in law, teaching, journalism and public administration. Our graduates have a very high success rate in being admitted to Law and Graduate Schools.

Lectures, seminars and individual tutorials are normal methods of

instruction and the department stresses personal contact with students as much as possible in order to assist students in choosing a postgraduate career in government, business or the academic field. Guest lectures are frequently given by visiting politicians, academics, interest group representatives and industry leaders.

The program is divided into seven divisions: I) General Introductory Courses, II) Canadian Politics, III) Political Theory, IV) Comparative Politics, V) International Relations, VI) Empirical Theory and Methods, VII) Honours Thesis, Independent Studies, Practicum and Internships.

Honours in Political Studies

An Honours program in Political Studies consists of at least 60 credits.

To enter or continue in an Honours program, students must normally obtain and sustain a cumulative average of 70% in their Political Studies courses. Honours students must maintain a satisfactory pattern of performance in all of their Political Studies courses, and **should not receive grades below 70% in more than one quarter of their Political Studies credits**. Honours students who do not fulfill all of the above requirements will automatically revert to the Major program. To be awarded Honours at graduation, students must be registered in the Honours program at Bishop's during their **last thirty (30) credits** of study. Honours standing for graduation will be determined by the students overall record in the Honours program.

Required Courses

Students in the Honours program shall normally take Pol 100a and Pol 101b early in their studies at Bishop's University. Students should normally take 100- level courses from the other divisions before attempting higher level courses. More advanced courses commonly have 100 - level prerequisites. **After they have completed 60 credits at Bishop's, students will need Departmental permission to take any further 100- level courses.** In addition to the General Introductory Courses, students must take the following:

- II. Canadian Politics: any two (2) courses
- III. Political Theory: Pol 323a **and** Pol 329b
- IV. Comparative Politics: any two (2) courses.
- V. International Relations: any two (2) courses
- VI. Empirical Theory and Methods: Pol 261a and **another** course in division III Political Theory. Honours students are required to take Pol 261a in their **first sixty (60) credits** at Bishop's University. Pol 262a, Pol 362b or Pol 460b may not be substituted for Pol 261a, but may be counted as a **second** course in division VI, in place of a division III course.

Due to the close linkages between Politics and Economics, **all honours students must also take: ECO 103 Principles of Economics: Macroeconomics**

400 and 500 Level Required Courses

These courses are open primarily to Honours students. Honours students have three (3) options:

- a) They may take only Pol 550/Honours Thesis. This course is normally taken in the last thirty (30) credits in the Honours program.

- b) They may take one (1) 400 level course, from the list below, plus Pol 350a or Pol 351b. These courses are normally taken in the last thirty (30) credits in the Honours program.
- c) They may take two (2) 400 level courses, from the list below. These courses are normally taken in the last thirty (30) credits in the Honours program.

II. Canadian Politics: Pol 410a

III. Political Theory: Pol 420a or Pol 421b

IV. Comparative Politics: Pol 431b, Pol 436a or Pol 438a

V. International Relations: Pol 441b

VI. Empirical Theory and Methods: Pol 460b

Honours Thesis and Independent Study

The Honours Thesis and Independent Study courses are open to advanced level Honours students. They are offered exceptionally and at the discretion of the Department. For further information, please obtain a copy of the departmental regulations and consult the Chair of the Department.

Cognate Courses

Honours students are normally expected to take at least 60 credits of Political Studies courses. However, students in their final thirty (30) credits of study, may petition the Department for authorization to take six (6) credits of cognate courses. This is to be done immediately following the formal registration period, but before the last day in the semester to add, drop or change all three-credit courses. It is understood that this is an exceptional measure to be granted at the discretion of the Department.

Major in Political Studies

A Major program in Political Studies consists of at least 48 credits.

Required Courses

Students in the Major program shall normally take Pol 100a and Pol 101b early in their studies at Bishop's University. Students should normally take 100 - level courses from the other divisions before attempting higher level courses. More advanced courses commonly have 100-level prerequisites. **After they have completed 60 credits at Bishop's, students will need Departmental permission to take any further 100-level courses.** In addition to the General Introductory Courses, students must take the following:

- II. Canadian Politics: any two (2) courses
- III. Political Theory: Pol 323a or Pol 329b
- IV. Comparative Politics: any two (2) courses.
- V. International Relations: any two (2) courses
- VI. Empirical Theory and Methods: Pol 262b or Pol 261a Majors should take one of these Division VI courses in their **first sixty (60) credits** at Bishop's University.

400 Level Courses

These courses are open primarily to Honours students, but may be offered in exceptional circumstances to advanced level Major students, who maintain a 70% average, at the discretion of the Department.

Independent Study

Independent study is open primarily to Honours students, but may be offered to advanced level Major students, who maintain a 70% average in Political Studies. These courses are offered exceptionally and at the discretion the Department. For further information, consult the Chair of the Department.

Cognate Courses

Major students are normally expected to take at least 48 credits in Political Studies courses. Students in their final thirty (30) credits of study, who maintain a 70% average may seek Departmental authorization for a three-credit cognate. This is to be done immediately following the formal registration period, but before the last day in the semester to add, drop or change all three-credit courses. It is understood that this is an exceptional measure to be granted at the discretion of the Department.

Minor in Political Studies

A Minor in Political Studies consists of at least 24 credits.

Required Courses

Students in the Minor program shall normally take Pol 100a and Pol 101b early in their studies at Bishop's University. Political Studies students have priority registration for Pol 100a and Pol 101b.

Any one course in II. Canadian Politics, III. Political Theory, IV. Comparative Politics and V. International Relations.

400 Level Courses

Not normally open to students in the regular Minor program.

Independent Study

Not normally open to students in the regular Minor program.

Cognates

No cognate courses are allowed in the regular Minor program.

PUBLIC ADMINISTRATION AND PUBLIC POLICY – PROGRAM REQUIREMENTS

Minor in Public Administration and Public Policy

This program is designed to provide instruction in public policy decision making, public administration, policy evaluation, and the policy styles of various authorities. It develops analytical and management skills relevant to the public service at both federal and provincial levels, and includes training for students wishing to pursue positions as policy analysts and policy advocates in non-governmental organizations (NGOs) or who are considering advanced studies at the Master of Public Administration and Master of Business Administration levels.

This minor consists of **24 credits**: 12 credits of required courses and 12 credits of elective courses.

(On course counting, consult the rules at the end of the section on the Minors).

Required Courses (12 credits):

One of the following three courses:

Pol 101b Introduction to Modern Governments

Pol 112a Canadian Political Process

Pol 118b Constitutional Law and Canadian Government

In addition:

Pol 214b Public Administration

Eco 103ab Principles of Economics: Macroeconomics

And one of the following courses:

Pol 330a Topics in U.S. Public Policy

Pol 333a The Internationalization of European Public Policy

Pol 334b Public Policy Analysis

Any additional required course can count as one of the four elective courses below.

Elective Courses (12 credits):

Choose any four of the following:

Pol 173b US Government and Public Policy

Pol 216b Canadian Provincial Politics

Pol 231a European Union

Pol 242a International Organizations

Pol 314b Law, Politics and Canadian Society

Pol 345b Introduction to Public International Law

Pol 410a Selected Topics in Canadian Public Policy

ECO 102ab Principles of Economics: Microeconomics

ECO 109ab Introduction to Economic Policy

ECO 204ab Labour Economics

ECO 205ab Industrial Organization

ECO 210ab Economics and the Law

ECO 308ab Managerial Economics

ESG 249a Resource Management

ESG 266b Environmental Policy

BAC 121ab Purposes of Accounting

BHR 221ab Organizational Behaviour

BHR 224ab Human Resource Management

BHR 312ab Industrial Relations

BHR 333b Employment Law

BMG 112ab Management Theory and Practice

BMG 221a Business Law

400 Level Courses

Not normally open to students in this special Minor program.

Independent Study

Not normally open to student in this special Minor program.

Cognates

No cognate courses are allowed in this special Minor program.

INTERNATIONAL STUDIES – PROGRAMS AND REQUIREMENTS

The International Studies programs provide students with working knowledge of the global community in which they live, and prepare them to pursue careers involving international interactions. The programs consist of an integrated group of courses reflecting international aspects from cultural, economic, environmental, legal, political and social perspectives. Foreign language training and study abroad experiences are also incorporated into the programs.

Major in International Studies

A Major program in International Studies consists of at least 48 credits, and it has a two-tier structure. It is designed to provide the

student with a broad base of understanding of the interrelationship of the world community, while at the same time providing the opportunity to specialize in an area of interest.

While all students have to complete 18 credits of foundation courses, 12 credits of language courses and an international exchange or an international internship, students should normally choose one of two concentrations to complete the last 18 credits. The **Global Governance Concentration** introduces you to theories, concepts and issues in world politics, examining areas such as conflict and intervention, peace and security, human rights, multinational corporations, environmental issues and globalization. The **Global Culture Concentration** is designed for those students who wish to develop critical understanding about how cultures are formed, the social and political impacts of cultural growth, and impacts of competing cultures from globalization.

Required Courses (30 credits):

POL101 Introduction to Modern Governments

POL140 International Relations

Plus one of:

POL241 International Affairs

POL242 International Organizations

Plus three of:

POL338 International Law and Human Rights

POL340 Strategic Issues: Questions of War and Peace

POL342 International Political Economy

POL345 Introduction to Public International Law

POL352 United Nations Practicum

Plus:

Two language courses at an intermediate level

Two language courses at an advanced level

Plus:

One semester exchange abroad

or

INT300 International Development Assistance Internship

Any additional required course can count as one of the electives in either of the two concentrations.

Elective Courses (18 credits):

Students should normally choose one of two concentrations:

Either:

Global Governance Concentration

Six of:

ECO103 Principles of Economics: Macroeconomics

ECO217 International Economics

ESG358 International Environmental Issues

POL170 Introduction to European Politics

POL172 Introduction to American Politics

POL173 US Government and Public Policy

POL231 European Union: History, Institutions and Policies

POL232 Politics in Asia

POL234 Politics of Africa

POL235 American Political Economy

POL236 Introduction to Middle Eastern Politics

POL245 American Foreign Policy

POL249 Canadian Foreign Policy

POL277 European Diplomacy Since 1914

POL317	Globalization and the Canadian State
POL333	Internationalization of European Public Policies
POL335	Politics of Latin America and the Caribbean
POL339	Political Development and Market Sentiments
POL343	Canadian-American Relations
POL346	Politics of Global Finance
POL347	Scandinavian Politics

or:

Global Culture Concentration:

Six of:

GER250	German Civilization and Culture
HIS105	The 20th Century World
HIS256	Latin America 1800 to the Present
HIS284	Twentieth Century China
JSE150	Japanese Society and Culture
POL221	Political Communication and Rhetoric
POL222	Politics and The Arts
POL271	American Political Thought
REL124	World Religions III: Hinduism
REL125	World Religions IV: Buddhism
REL126	World Religions V: Judaism
REL127	World Religions VI: Islam
REL200	Religion and Politics
REL256	History of Christianity I
REL257	History of Christianity II
SOC294	Sociology of Tourism
SOC296	Globalism and Culture
SPA311	Spain: Civilization and Culture
SPA313	Mexico: Civilization and Culture
SPA314	The Central American Region and the Spanish Caribbean: Civilization and Culture
SPA317	The Southern Cone and the Andean Region: Civilization and Culture

Note that some of these courses may have pre-requisites or, alternatively, require special permission from the instructor.

Minor in International Studies

Required Courses

A Minor in International Studies consists of at least 24 credits.

POL101	Introduction to Modern Governments
POL140	International Relations

Plus one of:

POL241	International Affairs
POL242	International Organizations

Plus three of:

POL338	International Law and Human Rights
POL340	Strategic Issues: Questions of War and Peace
POL342	International Political Economy
POL345	Introduction to Public International Law
POL352	United Nations Practicum

Plus:

Two language courses at an intermediate level.

Plus:

One semester exchange abroad

or

INT 300	International Development Assistance Internship
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Language Courses

The language(s) must be others than the student's mother tongue. These courses can be taken at Bishop's or from a program at another university, approved by the Department of Political Studies and the Department of Modern Languages.

Exchange Program

Students taking the International Studies Major or Minor will normally be required to spend a semester at one of the many universities abroad with which Bishop's has an exchange program. Such programs are developed in consultation with the Chair of the Political Studies Department. Note, however, that students must normally maintain a 70% average to be eligible for the exchange program. The Department will specify 6 credits of area studies to be taken abroad as part of the exchange program.

INT 300 – International Development Assistance Internship may substitute for the exchange program.

INTERNATIONAL POLITICAL ECONOMY - PROGRAMS AND REQUIREMENTS

The International Political Economy programs are offered jointly by the Departments of Economics and Political Studies. As an area of academic inquiry, International Political Economy examines the political relationships to economic activities in the international arena.

The B.A. Major Program in International Political Economy consists of at least 48 credits, with 24 credits drawn from Political Studies and 24 from Economics. The Honours program in International Political Economy consists of at least 60 credits, with 30 credits drawn from Political Studies and 30 from Economics.

To enter or continue in an Honours program, students must normally obtain and sustain a cumulative average of 70% in the Political Studies and Economics courses. Honours students who do not fulfill the above requirements will automatically revert to the Major program. To be awarded Honours at graduation, students must be registered in the Honours program at Bishop's during their last thirty (30) credits of study. Honours standing at graduation will be determined by the students overall record in the Honours program.

Honours in International Political Economy (60-credit program)

ECONOMICS REQUIREMENTS (30 CREDITS)

Required Courses:

ECO 102	Principles of Economics: Microeconomics
ECO 103	Principles of Economics: Macroeconomics
ECO 212	Intermediate Macroeconomics I (please note that MAT 191 or MAT 193: Calculus I is a prerequisite for this course)
ECO 270	Public Economics

Plus one of:

ECO 175	Economic Geography
ECO 217	International Economics
ECO 251	History of Economic Thought I
ECO 280	Contemporary Perspectives in Political Economy

Plus Free Elective Courses in Economics:

15 credits

POLITICAL STUDIES REQUIREMENTS (30 CREDITS)**Required Courses:**

POL 100 Politics, Theory and Government
 POL 101 Introduction to Modern Governments
 POL 342 International Political Economy

Plus two of:

POL 235 American Political Economy
 POL 317 Globalization and the Canadian State
 POL 329 Classical Political Philosophy II
 POL 334 Public Policy Analysis

Plus two of:

POL 140 International Relations
 POL 172 Introduction to American Politics
 POL 214 Public Administration
 POL 231 European Union
 POL 232 Politics in Asia
 POL 234 Politics of Africa
 POL 241 International Affairs
 POL 324 Marxian Political Thought
 POL 330 Topics in U.S. Public Policy
 POL 333 Internationalization of European Public Policies
 POL 339 Political Development and Market Sentiments
 POL 346 Politics of Global Finance

Plus:

One POL 400 level Course

Any additional required course can count as one of the electives.

Plus Free Elective Courses in Political Studies:

6 credits

Note that some of these courses may have pre-requisites or, alternatively, require permission from the instructor.

Major in International Political Economy (48-credit program)**ECONOMICS REQUIREMENTS (24 CREDITS)****Required Courses:**

ECO 102 Principles of Economics: Microeconomics
 ECO 103 Principles of Economics: Macroeconomics

Plus one of:

ECO 175 Economic Geography
 ECO 217 International Economics
 ECO 251 History of Economic Thought I
 ECO 270 Public Economics
 ECO 280 Contemporary Perspectives in Political Economy

Plus Free Elective Courses in Economics:

15 credits

POLITICAL STUDIES REQUIREMENTS (24 CREDITS)**Required Courses:**

POL 100 Politics, Theory and Government
 POL 101 Introduction to Modern Governments
 POL 342 International Political Economy

Plus two of:

POL 235 American Political Economy
 POL 317 Globalization and the Canadian State
 POL 329 Classical Political Philosophy II
 POL 334 Public Policy Analysis

Any additional required course can count as one of the electives.

Plus Free Elective Courses in Political Studies:

9 credits

Note that some of these courses may have pre-requisites or, alternatively, require permission from the instructor.

Counting of Courses in Special Minors

Students registered simultaneously in Political Studies Honours, Major and regular Minor programs, as well as in the International Studies Minor, and in the Public Administration and Public Policy Minor, may normally count only a limited number of credits of these Special Minors, towards their Honours, Major and regular Minor programs (double counting):

- Only 18 Political Studies credits from the two Special Minors shall count towards the Honours program.
- Only 15 Political Studies credits from the two Special Minors shall count towards the Major program.
- Only 12 Political Studies credits from the two Special Minors shall count towards the regular Minor program.

Students Outside of the Program

Students not in the Political Studies Honours, Major and regular Minor programs shall normally take Pol 100a and Pol 101b early in their studies at Bishop's University.

Other Recommended Courses:

- II. Canadian Politics: Pol 112a or Pol 118b
- III. Political Theory: Pol 323a
- IV. Comparative Politics: Pol 102b, Pol 170b, Pol 172a, Pol 173b, Pol 236
- V. International Relations: Pol 140b

400 level courses, Independent Studies, and cognates are not normally open to students outside the program.

COURSE OFFERINGS FOR PROGRAMS IN POLITICAL STUDIES**I. General Introductory Courses**

Political Studies 100a **Politics, Theory and Government** **3-3-0**
 A study of politics within the discipline of political studies and the application of scientific thinking and method to contemporary problems in society. Classical and modern theories will be used to examine such notions as equity and equality, participation and control, force and morality as they relate to authority in the nation-state and international affairs.

Professor Tucker

Political Studies 101b **Introduction to Modern Governments** **3-3-0**
 A broad view of modern political institutions and processes. The differing forms and workings of governments - unitary, federal, presidential, parliamentary/cabinet, and how they get things done. The main features of representative democracies; comparative party, voting and electoral systems; referendums and recall procedures. Various countries will serve to illustrate the varieties and styles of governing.

Professor Ugland

II. Canadian Politics

Political Studies 112a The Canadian Political Process 3-3-0

An analysis of the Canadian political process. This course will examine the social and economic environment of Canadian politics, political culture and socialization, political participation, voting behaviour, political parties and interest groups.

Professor Johnson

Formerly Pol 212a

Political Studies 115a Canadian Politics in the 21st Century 3-3-0

An examination of external and internal problems challenging Canada and other postindustrial states in the 21st century. Issues such as globalization, technological change, nationalism and the changing nature of the state itself will be examined.

Normally offered in Continuing Education.

Professor Johnson

Political Studies 118b Constitutional Law and Canadian Government 3-3-0

An analysis of the impact of leading constitutional decisions on the structure of Canadian government.

Professor Johnson

Formerly Pol 218b

Political Studies 211a Canadian Social and Political Thought 3-3-0

A study of community linkages as the basis of decision making: how the interaction and/or dominance of various elites produce social forces which shape and share power in Canadian society. Empirical studies and theories on elites, community power and corporatism will be used to examine aspects of Canadian political behaviour.

Staff

Political Studies 214a Public Administration 3-3-0

An introduction to the theory and practice of public administration in Canada. The structure of the public service, organization theory and motivation theory, public planning and finance, public personnel administration, the growth of administrative discretion and administrative responsibility will be studied.

Prerequisite: One POL 100-level course or permission of instructor

Professor Johnson

Political Studies 216b Canadian Provincial Politics 3-3-0

A comparative analysis of contemporary trends in provincial policy making with special emphasis on Quebec. The structures and processes of provincial policy making will be examined. Provincial language policies, social policies, and resource policies will be studied.

Professor Johnson

Political Studies 314b Law, Politics and Canadian Society 3-3-0

This course examines the interaction of law and politics with societal and national values. Selected aspects of the Canadian legal system will include such topics as: criminal behaviour and sanctions, environmental protection, international law, labour relations and employment law, commercial law, consumer protection, immigration, family law, native rights, social welfare legislation and the accessibility of legal services.

Staff

Political Studies 317a Globalization and the Canadian State 3-3-0

In this course, the effects of the multilateral (World Trade Organization) and continental (North American Free Trade Agreement) trading systems on the Canadian state are analyzed. In particular, the effects of recent economic and technological forces on Canadian political processes and structures and on selected public policies will be examined.

Prerequisite: Pol 112 or permission of instructor

Professor Johnson

Political Studies 410a Selected Topics in Canadian Public Policy 3-3-0

An analysis of selected topics in Canadian public policy from a comparative theoretical perspective. Lectures and seminars.

Honours students only or permission of instructor.

Professor Johnson

III. Political Theory

Political Studies 221a Political Communication and Rhetoric 3-3-0

The form and content of purposive political action to be found in information, instruction and persuasion through a study of models of communication and control. The course will examine the foundation and role of rhetoric in political speeches, debates and documents in relation to the concepts of political culture, the media and the available technology. Some of the sources to be consulted are: Aristotle, Cicero, Edmund Burke, Frederick Douglass, Emma Goldman, Winston Churchill, Jesse Jackson, and various contemporary political speeches.

Professor Tucker

Political Studies 222b Politics and The Arts 3-3-0

A study of politics and its various modes of expression will be conducted from the inquiry of Aristotle's Rhetoric and other literature. Concepts such as idealism, realism, ideology and violence are to be explored from a classical background of tragedy, modern essays and fiction. Some works to be used are from: Aristotle, Camus, Dostoevsky, Simone Weil, di Lampedusa, Nietzsche and others.

Professor Tucker

Political Studies 223b/ 223b Democracy in the Ancient World 3-3-0

The idea of government by the people is highly valued today, but it was first given the name of "demokratia" (democracy) in ancient Greece. The most famous example in Greece is Classical Athens, but democratic elements appeared in many other ancient states, including republican Rome. The course will examine in detail how democracy worked in Athens, Rome, and various other ancient societies: how it began, who could participate, who was left out, what ancient writers thought of it and what were the results of democratic government on those inside and outside of the community.

Political Studies 322b Theories of Totalitarianism and Racism 3-3-0

An inquiry into the origins and causes of totalitarianism and racism. The course will evaluate the notion that the interrelation of ideology and technology in the 20th century leads to a unique form of repression in the history of politics. Authors will include George Orwell, Hannah Arendt, J.L. Talmon, Erich Fromm, Frantz Fanon and Malcolm X.

Prerequisite: Pol 100a or permission of instructor.

Professor Tucker

Political Studies 323a Classical Political Philosophy I 3-3-0

The history of political philosophy through a study of the classical theories from Plato to Machiavelli. The development and change of such concepts as justice, ethics, authority, the individual and the community are explored. A brief comparison with Eastern political philosophy is undertaken.

Prerequisite: Pol 100a or permission of instructor.

Professor Tucker

Political Studies 324b Marxian Political Thought 3-3-0

A study of the analytical fundamentals of Marx's view of politics as derived from his critique of Hegel. The study of the development of Marx's analysis of society, political economy and historical conjunctures.

Political Studies 329b Classical Political Philosophy II 3-3-0

The psychosocial notions about man in a natural state and in society are explored in relation to individualism in Western market society. Analyses focus upon such concepts as the social contract, rationalism, revolution, conservatism, authority, political obligation and the growth of modern democratic theories. Hobbes, Locke, Rousseau, Burke, Hegel, Bentham, J.S. Mill and Marx are the main theorists considered.

Prerequisite: Pol 100a or permission of instructor.

Professor Tucker

Political Studies 338b International Law and Human Rights 3-3-0

An analysis of the theory and practice of fundamental human rights in contemporary societies. A comparative study of the development and problems of civil liberties from a legal perspective.

Prerequisites: POL 140 and POL 242 or permission of instructor.

Staff

Political Studies 420a Modern Political Thought 3-3-0

A study of various approaches and forms expressed in 20th century politics and society: symbolism, myth, scepticism, the psychological, anarchism and structuralism. Works will be from Freud, Oakeshott, Marcuse, Sartori, MacIntyre and Hayek.

Honours students only or permission of instructor.

Professor Tucker

Political Studies 421b Advanced Political Thought 3-3-0
The rise of liberal democracy and its critics. A textual study of Rawls' *A Theory of Justice* elucidates elite and critical theories, the notions of positive and negative liberty and concepts surrounding modern rights and duties within the political economy of the modern state and society. Other readings will be from: Max Weber, Hannah Arendt, Jacques Derrida and Ophulus' Requiem.
Honours students only or permission of instructor.
Professor Tucker

IV. Comparative Politics

Political Studies 102b Introduction to Contemporary Political Ideologies 3-3-0
A study of classical and modern liberalism, conservatism and socialism, as well as other ideologies. An examination of the impact of ideologies on the actions of political parties and politicians, as well as on public policies.
Professor Ugland
Formerly Pol 202b

Political Studies 170b Introduction to European Politics 3-3-0
A comparative analysis of European political history, economy, culture, and politics.
Professor Ugland
Formerly Pol 270b

Political Studies 172a Introduction to American Politics 3-3-0
An introduction to political behaviour and processes in American society. Topics will include the socioeconomic bases of U.S. politics, the Constitution, political ideology and culture, parties, interest groups, elections and voting behaviour.
Professor Stritch
Formerly Pol 272a

Political Studies 173b U.S. Government and Public Policy 3-3-0
An examination of U.S. political institutions and government outputs: the Presidency, Congress, the bureaucracy, federalism, the judicial system and public policy.
Professor Stritch
Formerly Pol 273b

Political Studies 231b European Union: History, Institutions and Policies 3-3-0
A study of the foundation, operation, and policies of the European Union (EU). The first part of the course examines the history of the EU, the second part looks at its institutions, and the final part explores EU policy making processes and several different policy areas.
Professor Ugland

Political Studies 232 Politics in Asia 3-3-0
This course will examine one or more Asian countries, such as China, India or Japan. It will focus on the character of domestic political institutions, processes, and culture in the context of a changing international environment.
Staff
Prerequisite: POL100 or permission of instructor

Political Studies 234b Politics of Africa 3-3-0
Students are exposed to the approaches of political anthropology in the examination of ancient kingdoms, tribal societies, traditional cultures and the development of contemporary nations in Africa. Present political structures and processes are examined within the framework of Third World politics.
Professor Tucker

Political Studies 235 American Political Economy 3-3-0
This course studies the links between politics and economics in the United States and attempts to place this relationship in both its historical and international contexts. It examines how the principal forces in American society interact to shape public policy, as well as looking at the impact of government in managing and regulating economic activity.
Prerequisite: POL 172 or permission of instructor
Professor Stritch

Political Studies 236b Introduction to Middle Eastern Politics 3-3-0
The course will focus on the forces that have shaped current Middle Eastern politics: particularly the growing influence of Islam and Islamic fundamentalism on political life and thought; the enduring legacies of westernization, colonialism and secular nationalism; and the Arab-Israeli conflict. Arriving at an understanding of Middle Eastern politics in this course will also entail study of the challenges modernizing states, parties and leaders are confronting today, and the profound impact of Western interests and policies on the region.
Formerly POL131b
Staff

Political Studies 271a American Political Thought 3-3-0
An examination of early and contemporary American documents dealing with the philosophical notions of freedom, public access, government accountability and the regulation of society. The growth of a corporate democracy will be examined within the changing needs of private interests, public and transnational activities.
Professor Tucker

Political Studies 330a Topics in U.S. Public Policy 3-3-0
A study of some of the most controversial issues in contemporary American politics. Topics may include abortion, euthanasia, gun control, capital punishment, pornography, hate speech and censorship, drug legalization, affirmative action and welfare reform.
Professor Stritch

Political Studies 332a The European State in Historical Perspective 3-3-0
The purpose of the course is twofold: first, to determine why Europe developed into a relatively wealthy region; and, second, to determine why France embarked on the liberal-democratic route to modernity while Germany opted for the fascist route.

Political Studies 333a Internationalization of European Public Policies 3-3-0
An advanced study of the European integration process from a political science / political economy point of view. The relationships between Europeanization, internationalization and globalization of public policies in Europe will be examined.
Prerequisite: POL 231 or permission of instructor
Professor Ugland

Political Studies 334b Public Policy Analysis 3-3-0
A critical analysis of the formation, content, and impact of public policy within selected postindustrial societies.
Professor Johnson

Political Studies 335b Politics of Latin America and the Caribbean 3-3-0
Latin American and Caribbean politics will be studied through general theories of development. Examined are such notions as growth, modernity, industrialization, underdevelopment, cultural history as they relate to national and international dependency and interdependency.
Professor Tucker

Political Studies 339 Political Development and Market Sentiments 3-3-0
A study of various theories of political development in new nations and the influence of global market sentiments. An exploration of works such as Adam Smith's, *A Theory of Moral Sentiments*, Charles Lindblom's, *Politics and Markets* as they apply to Huntington and Weiner's *Understanding Political Development* and the "Clash of Civilizations" thesis. Countries and regions in Africa, Asia and Latin America will be selected for an examination of the relationship of globalization and development theories.
Prerequisite POL100 or permission of instructor.
Professor Tucker

Political Studies 347a/b Scandinavian Politics 3-3-0
A study of political structures and processes in the Nordic countries of Denmark, Finland, Iceland, Norway and Sweden. While largely based on the comparative approach to the study of policies, the program will also highlight special features in each Nordic country. This course will also draw on comparisons between the Nordic countries and Canada.
Professor Ugland

Political Studies 431b The American Welfare State 3-3-0
A study of the origins, development and contemporary character of the social policy network in the United States. The structure of the welfare state, its current problems and attempts at reform will be examined in a theoretical and comparative context.
Honours students only or permission of instructor.
Prerequisite: Pol 172
Professor Stritch

Political Studies 436a Comparative Politics: A World of Regions 3-3-0
Regions and regional integration have become critical to contemporary world politics. This course offers a comparative analysis of regional integration efforts and their consequences in different parts of the world.
Professor Ugland
Honours students only or permission of instructor

Political Studies 438a Honours Seminar in Political Economy 3-3-0
An analysis of selected classical and contemporary literature inquiring into the nature and causes of the wealth of nations.
Professor Johnson
Honours students only or permission of instructor

V. International Relations

Political Studies 140a International Relations 3-3-0
Examination of international political issues, institutions and processes. How do states behave toward each other in different types of international systems, and why do they behave in certain ways? Some discussion of international law.

Professor Gagné

Formerly Pol 240a

Political Studies 241b International Affairs: Conflict, Ethics, and the Prospects for Global Governance 3-3-0

A study of global conflict and cooperation. The nationstate system, international organizations and contemporary forms of transnational behaviour, such as political terrorism, are to be examined. The major themes of the course will include NorthSouth justice issues, current attempts to obtain a new international equilibrium, and the prospects for global governance/democracy.

Prerequisite: Pol 140, or permission of instructor

Professor Gagné

Political Studies 242a International Organizations: Principles, Institutions and Politics 3-3-0

A study of the origins, structures and processes of institutions designed to resolve world conflict and secure international cooperation. The United Nations and Regional Organizations will be examined.

Prerequisite: Pol 140a, or the permission of instructor

Professor Gagné

Political Studies 245b American Foreign Policy 3-3-0

The development of American foreign relations and national security policy in the twentieth century. Topics include: interventionism and isolationism, the Cold War and the nuclear arms race, the Cuban missile crisis, Vietnam, détente, US secret intelligence, US-Soviet relations in the Reagan era, the Gulf War, and US foreign policy in the post-Soviet world order.

Prerequisite: Pol 140, or permission of instructor

Professor Gagné

Political Studies 249b Canadian Foreign Policy 3-3-0

An analysis of the development of Canadian foreign policy and defence policy. Canada's relations with the Superpowers, the European Union and the Third World will be studied. Topics will include Canada's role in the U.N. and N.A.T.O., Canada's antinuclear diplomacy, and Canada's domestic interests in relation to energy, the Law of the Sea and aerospace law.

Prerequisite: Pol 140, or permission of instructor

Professor Gagné

Political Studies 277 European Diplomacy Since 1914 3-3-0

This course examines the international relations and foreign policies of the major European states from the beginning of World War I to the Cold War and the emergence of the New Europe.

Antirequisite: HIS 366

Professor Gagné

Political Studies 340a Strategic Issues: Questions of War and Peace 3-3-0

A study of the general character of war and conflict in the modern world since World War II. Discussions of the basic trends which influence conflicts, be they superpower rivalry or peculiar local conditions. Inquiry into the exploitation or the containment of conflicts by the major powers. Analysis of the most important crises and actual conflicts in such geopolitical areas as the Middle East, Central America, Africa or Asia. Discussion of the changing patterns of warfare, conventional and nuclear strategies, détente and changes in the maintenance of peace in the future.

Prerequisite: Pol 140a, or permission of instructor

Staff

Political Studies 342b International Political Economy 3-3-0

A study of the political relationships to economic activities in the international arena. The theories, actors and structures in the world political economy will be examined.

Prerequisite: Pol 140a, or permission of instructor

Professor Johnson

Political Studies 343b Canadian-American Relations 3-3-0

This course seeks to describe the main aspects of the relations between Canada and the United States. For that purpose, we will concentrate on the main determinants of the bilateral relationship, analyzed around five major themes: the political relations, the economic and trade relations, the identity/cultural relations, the defence and security relations, and the environmental relations.

Prerequisite: Pol 140a, or permission of instructor

Professor Gagné

Political Studies 345b Introduction to Public International Law 3-3-0

An introduction to the nature and development of international law which includes topics such as the law of treaties, the law of the sea, air and space law, and international environmental law as well as jurisprudence related to international dispute settlement.

Prerequisite: Pol 140 and POL 242 or permission of instructor

Staff

Political Studies 346 Politics of Global Finance 3-3-0

A thematic exploration of the issues and politics of the global financial system. This course explores areas of money and global capital movements, financial instruments and bodies. It examines the functioning and ramifications of international finance, including the politics of international debt, global monetary relations and the transnational governance initiatives of global financial markets and actors.

Political Studies 441b Theories of International Relations 3-3-0

A study of the various theories used in the investigation of international political behaviour: systems, models, empirical research will be examined towards a more precise understanding of evolving structures and processes in the international arena.

Honours students only or permission of instructor

Prerequisite: Pol 140, or permission of instructor

Professor Gagné

VI. Empirical Theory and Methods

Political Studies 261a Techniques of Empirical Research 3-3-0

An introduction to empirical political research: the formulation of research problems, the selection of samples, interviewing, questionnaire construction, analysis and interpretation of data.

Professor Stritch

Political Studies 262a Introduction to Political Analysis 3-3-0

An introduction to key concepts in the study of politics in general and comparative politics in particular. An overview of the main assumptions, questions, concepts and patterns of inference of the principal approaches in political science.

Professor Stritch

Political Studies 362b Comparative Political Behaviour 3-3-0

The study of selected issues in comparative politics using quantitative techniques of data analysis. Topics may include such things as political participation, social movements, ideology and political culture, the welfare state, national identity, political parties and voting behaviour.

Prerequisite: Pol 261a, or permission of instructor.

Professor Stritch

Political Studies 460a Topics in Empirical Research 3-0-0

An application of analytical techniques to specific problems in political research. Attention will focus on a detailed examination of selected issues at an advanced level.

Honours students only or permission of instructor

Professor Stritch

VII: Honours Thesis, Independent Studies, Practicum and Internships

Political Studies 350a Independent Study 3-3-0

Individual research and reading under the guidance of an advisor and the Department, of special themes in political studies.

Prerequisite: Permission of the Department and instructor

Staff

Political Studies 351b Independent Study 3-3-0

Individual research and reading under the guidance of an advisor and the Department, of special themes in political studies.

Prerequisite: Permission of the Department and instructor

Staff

Political Studies 352b United Nations Practicum 3-3-0

The study of the processes and structures of the United Nations System through seminars and labs, culminating in an annual Model United Nations simulated conference. Students will study the UN's specialized agencies and related organs, and affiliated intergovernmental organizations. Students will prepare various position papers on a selected country, and develop resolution drafting and negotiating skills in preparation for the simulated conference.

Prerequisites: Pol 140a and one of Pol 241b or Pol242a and the permission of the instructor.

Staff

Political Studies 353**The Nicholas Bachand Canadian Civil Society Internship**

The Nicholas Bachand Canadian Civil Society Internship is intended to provide a practical work-experience related to the Political Studies Minor in Public Policy and Public Administration. The internship is intended to enable students to contribute to the well-being of Canadian society by participating in voluntary and non-profit non-governmental organizations (NGOs).

Political Studies 550**Honours Thesis****6-3-0**

Individual research and reading under the guidance of an advisor and the Department, on advanced themes in Political Studies.

Prerequisite: Permission of the Department and instructor.

Staff

INT 300**International Development Assistance Internship**

Students must secure the approval of a Department and a faculty member in that Department to supervise an AUCC/Canada Corps Internship, a Champlain Regional College-Bishop's University Mai-Sot Internship, a Champlain Regional College Peru Internship or any other internship, sponsored by an NGO or accredited institution recognized by a Selection Committee, chaired by the Vice-Principal. Application for selection and funding must be addressed to the Vice-Principal's Office normally by December 1. The number of internships is subject to acceptance by sponsoring agencies and availability of funding.

Note: Independent Studies and Honours Thesis courses are normally taken in the last thirty (30) credits in the program. See the departmental regulations, for Honours Thesis and Independent Study courses.

Psychology

Psychology aims at giving students an understanding of the human mind and behavior. We offer a number of Major and Honours programs that emphasize Psychology as an objective science, cover the various subfields of Psychology and allow students to gain specialization into specific areas of interest (Clinical Psychology, Health Psychology, Human Resources Management and Neuroscience). We also offer a Minor in Psychology and a Minor in Health and Sports Studies, as well as a Certificate in Human Psychology.

Within this general framework, we offer an array of courses that apply the psychological approach to a wide range of topics. We emphasize quality of teaching and a close relationship between professors and students. A fundamental concern of the Department is the preparation of students for further training in Psychology and allied fields at the graduate level.

Admission into Psychology Programs

Students applying on the basis of a completed DEC will be admitted into a three-year program. Students from outside Quebec applying on the basis of an Ontario OSSD or a Grade 12 or equivalent will be accepted into a four-year program.

Students that have graduated from specific programs at Humber College or Georgian College will be admitted into specifically designed programs. These programs are listed under "Programs Specified under College Articulation Agreements".

Students may normally transfer into a B.A. Major or Honours Psychology program from another Bishop's program, provided they have a minimum cumulative average of 65% on at least 24 course credits completed at Bishop's, or provided they have demonstrated an aptitude for the program by achieving an average of 65% in all program courses attempted (minimum of 12 credits).

Prerequisites

All our programs include two Introduction to Psychology prerequisites (PSY101 and PSY102). Our Majors/Honours programs also include an Introductory Biology (PBI/PBL 191) prerequisite.

These courses must be completed within the first three semesters of study. Note that these prerequisites will be waived for students who have completed CEGEP courses in Psychology (Introductory Psychology and two other Psychology courses) and Human Biology.

Special Requirements for Honours

To qualify for an Honours program a student must have a cumulative average of at least 75% in program courses. Students must also achieve a combined average of at least 70% in PSY313 (Advanced Research Methods) and PMA360 (Advanced Psychological Statistics). Eligible students will officially transfer into Honours after the acceptance of their dissertation proposal in the Fall term of their final year.

Psychology Programs

Please note that the complete list of courses to be taken within each program is outlined in the table on the next pages.

Major and Honours in Psychology (54 and 72 credits)

This classic program is the most flexible. Most students first register into this program and then may consider switching to a more specific concentration. The Major includes 36 credits of Core Courses and 18 credits of Psychology options for a total of 54 credits. The Honours adds an additional 18 credits of Core Courses for a total of 72 credits.

Major or Honours in Psychology - Clinical Concentration (60 and 84 credits)

This program emphasizes the applied side of Psychology. The Major includes 36 credits of Core Courses and 24 credits of courses specific to the Clinical concentration for a total of 60 credits. The Honours adds an additional 18 credits of Core Courses and an additional 6 credits of Honours courses specific to the Clinical concentration for a total of 84 credits.

Major or Honours in Psychology - Health Concentration (60 and 81 credits)

This new and expanding program explores the links between behavior and lifestyle on the one hand, and physical or mental wellness on the other. The Major includes 36 credits of Core Courses and 24 credits of courses specific to the Health concentration for a total of 60 credits. The Honours adds an additional 18 credits of Core Courses and an additional 3 credits of Honours courses specific to the Health concentration for a total of 81 credits.

Major or Honours in Psychology - Human Resources Concentration (63 and 81 credits)

This allows students to follow a mix of Psychology and business courses. It is designed for students wishing to pursue a career either as psychologists or as administrators in the corporate world. The Major includes 36 credits of Core Courses and 27 credits of courses specific to the Human Resources concentration for a total of 63 credits. The Honours adds an additional 18 credits of Core Courses for a total of 81 credits.

Major or Honours in Psychology - Neuroscience Concentration (B.Sc.; 51 and 66 credits)

This program focuses on the physiological aspects of Psychology and the brain-behavior relationship. To complete the neuroscience program within three years, Quebec students should enter with a

collegial diploma in science (D.E.C.), that includes Mathematics 201-NYA-05, 201-NYB-05, Physics 203-NYA-05, 203-NYB-05, Chemistry 202-NYA-05, 202-NYB-05, and Biology 101-NYA-05. Students entering from other CEGEP programs or from Grade 12 will be required to complete science prerequisites prior to undertaking the neuroscience major and will usually complete the degree in four years. The major includes 45 credits of courses and 6 credits of lab work for a total of 51 credits. The Honours adds an additional 15 credits for a total of 66 credits.

Minor in Psychology (24 credits)

This very flexible Minor involves completing any 8 courses in Psychology. This flexible and popular minor has been joined with Majors/Honours in almost every discipline offered at Bishop's. The

most popular and most useful combinations include, among others: Biology, Political Studies, Sociology, Business, Philosophy, English and Education.

Minor in Health and Sports Studies (24 credits)

This new program involves taking 8 courses related to health and sports. Several of these courses are from Psychology but others are from various disciplines within the social sciences, natural sciences, business and humanities divisions.

Certificate in Human Psychology (30 credits)

This program is designed for adult students. It has particular relevance for teachers, health or social workers, and managers. It involves taking 10 psychology courses that directly relate to human behavior.

Major in Psychology

Physiological - Take ONE

PBI379a Clinical Neuropsych.
PBI380b Psychopharmacol.
PBI388a Brain Behavior II

Cognitive - Take ONE

PBI217b Motivation Emotion
PSY302a Perception
PSY370a Learning Memory

Developmental - Take TWO

PSY236a Child Dev. I
PSY237b Child Dev. II
PSY266b Adult Dev. Aging
PSY290b Adolescence
PSY333a Exceptional Child.

At least TWO other

Psychology courses

18

Major- Human Res. Conc.

Required courses

PBI217b Motivation Emotion
BMG112 Manag. Theory
BHR221 Org. Behavior (or PSY309)
BMR224 Hum. Res. Man.

Business options- take FIVE

BHR312 Industrial Rel.
BHR313 Compensation Man.
BHR315 Training Dev.
BHR316 Organiz. Conflict
BHR321 Org. Theory
BMG322 Industrial Man.
BHR325 Topics in HR Man.
BHR326 Recruitment
BHR328 Occupational Health
BHR333 Employment law
BHR334 Adm. Col. Agr.

27

PSYCHOLOGY CORE FOR ALL B.A. PROGRAMS

*These courses are required for all four
Psychology B.A. programs*

Prerequisites

PSY101ab Intro. Psy. I
PSY102ab Intro. Psy. II
PBI/PBL191a Intro. Biology

Core courses

PSY206a Personality I
PSY207b Personality II
PSY213b Research Methods
PSY245a Social Psy. I
PMA260a Statistics
PBI288b Brain Behavior I
PSY301a Abnormal Psy.
PCS305b Cognition
PSY311b Psychopathologies
PMA353b Psychometrics
PSY342a History Psy.
PMA360b Adv. Statistics

36

*These additional courses are required
for all four Psychology B.A. Honours
programs*

Honours Core courses

PSY313a Adv. Res. Methods
PSY443b History Psy. Sem.
PMA460b Multivariate Stats
PSY 498a Honours Seminar
PSY 499f Honours Thesis*

**Please note that PSY499 is a year-long,
6-credit course*

18

Major- Health Conc.

Required courses

BIO131 Health and Disease
PSY203a Sports: perform.
PSY204b Sports: social
PSY266b Adult Dev. Aging
PSY275a Health Psy. I
PSY276b Health Psy. II
PBI327a Psy. Nutrition
PBI380b Psychopharmacol.

24

Honours (additional)

PSY440b Health Internship

3

Major- Clinical Conc.

Required courses

PSY330a Psy. Ethics
PSY333a Exceptional Child.
PSY336b Clinical Interview
PSY337a Crisis Intervention
PBI380b Psychopharmacol.

Clin. options-Take THREE

PSY214 Community Psy.
PSY219b Psy. Women
PSY222 Group Dynamics
PSY236a Child Dev. I
PSY237b Child Dev. II
PSY266b Adult Dev. Aging
PBI277 Phys. Mental Health
PSY290b Adolescence
PSY293 Multicultural Psy.
PBI345 Family Dynamics
PBI379a Clinical Neuropsych.
PBI388a Brain Behavior II

24

Honours (additional)

PSY441a Adv. Clin. Sem.
PSY442b Clin. Practicum

6

Major and Honours in Neuroscience (B.Sc.)

Prerequisite

PSY101ab Intro I

Prerequisites; Grade 12 and non-science CEGEP students

PBI/PBL 191	Intro Biology
CHE191/081	Gen. Chem. I
CHE192/082	Gen. Chem. II
MAT198/088	Calculus I
MAT199/089	Calculus II
PHY193/083	Physics I
PHY194/084	Physics II

Required courses-Psychology

PSY213b	Research Methods
PMA260a	Statistics
PBI288b	Brain Behavior I
PCS305b	Cognition
PMA360b	Advanced Statistics
PBI388a	Brain Behavior II
PBI379a	Clin. Neuropsych.
PBI380b	Psychopharmacol.

Required courses– Nat. Sciences

CHE 105a/185a	Org. Chem.
BIO110a	Cellular Molecular
BIO/BIL115a	Diversity of life
BIO/BIL118b	Genetics
BIO/BIL215b	Metabolism
BIO/BIL226a	Animal Phys. I
BIO/BIL228b	Animal Phys. II

Course credits: **45**

Lab credits: **6**

Honours required courses

PSY313a	Adv. Res. Methods
BIO359a	OR BIO360a
PSY498a	Honours Seminar
PSY499f	Honours Thesis*

*Please note that PSY499 is a year-long, 6-credit course

Minor in Health and Sports Studies

Chose any EIGHT (8) of the following courses

24

Psychology courses

Prerequisites

PSY101ab	Intro Psy. I
PSY102ab	Intro Psy. II

PSY203a	Sports: Perform.
PSY204b	Sports: Social
PSY228	Occupational Health
PBI275a	Health Psy. I
PBI276b	Health Psy. II
PBI288b	Brain Behavior I
PBI327a	Psy. Nutrition
PBI380b	Psychopharmacol.

Non-Psychology courses

EXS101/181	Intro Exercise Sci.
CLA130	Sport Ancient World
SOC155	Soc. Sports
SOC219	Soc. Body
SOC220	Work and Leisure
SOC229	Gender Culture
SOC294	Soc. Tourism
SOC307	Soc. Health
SPO201	Culture and Society

Note: high school biology or chemistry is recommended or required for the following:

BIO127	Exercise Physiology
BIO131	Health and Disease I
BIO132	Health and Disease II
BCH191	Modern Biochem
BIO373/383	Adv. Ex. Sci.

Note: the following courses have prerequisites that are not included in the minor

ESG264	Outdoor recreation
BMK362	Sports Marketing
BHR328	Occ. Health Safety

Minor in Psychology

The minor in Psychology is composed of any EIGHT (8) Psychology courses.

24

Certificate in Human Psychology

30

This program is designed for adult students interested in human psychology. It has particular relevance for teachers, health or social workers and managers

Required courses

PSY101ab	Intro Psy. I
PSY102ab	Intro Psy. II

Block A – Choose FOUR

PSY206a	Personality I
PSY207b	Personality II
PSY236a	Child Dev. I
PSY237b	Child Dev. II
PSY245a	Social Psy. I
PSY246b	Social Psy. II
PSY266b	Adult Dev. Aging
PSY333a	Exceptional Child.

Block B- Choose FOUR

PSY203a	Sports I
PSY204b	Sports II
PSY219a	Psy. Women
PSY275a	Health Psy. I
PSY276b	Health Psy. II
PSY290b	Adolescence
PSY301a	Abnormal
PCS305b	Cognition
PSY309	I/O Psych
PSY311b	Psychopathologies
PSY329a	Appl. Mem. Cog.
PSY336b	Clinical Interview
PSY337a	Crisis Intervention
PSY345	Family dynamics

Psychology Programs Specified under Articulation Agreements

Students having completed specific Psychology-related degrees at Humber College or Georgian College can complete specifically designed two- or three-year programs. The four programs designed for Humber students and the four programs designed for Georgian students are outlined in the table that follows. **Please note that these programs are not open to the general student population.**

PROGRAMS FOR STUDENTS THAT HAVE COMPLETED SPECIFIC DEGREES AT HUMBER COLLEGE

Child and Youth Worker - Clinical Psychology option (45 credits) AND Developmental Service Worker- Clinical Psychology option (60 credits) <i>Required courses</i> PSY301a Abnormal Psy. PSY311b Psychopathologies PSY330a Psy. Ethics <i>Physiological - Take ONE</i> PSY302a Perception PBI327a Psy. Nutrition PBI379a Neuropsychology PBI380b Psychopharmacol <i>Clinical Social - Take TWO</i> PSY214 Community Psy. PSY219b Psy. Women PSY246b Social Psy. II PSY336b Clinical Interview PSY345 Family Dynamics <i>Developmental - Take ONE</i> PSY266b Adult Aging EDU285 Psy. Reading PSY290b Adolescence EDU301 Educational Psy. PSY333a Except. Child <i>Additional courses for:</i> Developmental Service Worker- Clinical Psychology option (60 credits) Free Options – Any FIVE courses	PSYCHOLOGY CORE FOR HUMBER COLLEGE B.A. PROGRAMS <i>All four B.A. programs for students admitted under the articulation agreement with Humber College contain the following Core courses:</i> PSY206a Personality I PSY207b Personality II PSY213b Research Methods PSY245a Social Psy. I PMA260a Statistics PBI288b Brain Behavior I PMA353b Psychometrics PMA360b Adv. Statistics <i>In addition, the four programs contain specific courses. Please refer to the right and left column of this table to find those that apply to you.</i> <i>Note that the number in bold represent credits. A course is worth 3 credits.</i>	Developmental Service Worker- General Psychology option (60 credits) <i>Required course</i> PSY342a History Psy. <i>Cognitive - Take ONE</i> PBI217b Motivation Emotion PSY302a Perception PCS305b Cognition PSY370a Learning Memory <i>Developmental- Take ONE</i> PSY266b Adult Aging PSY290b Adolescence <i>Social- Take ONE</i> PSY204b Sports: social PSY219b Psy. Women BHR221 Org. Behavior PSY246b Social Psy. II Free options – Any EIGHT courses Developmental Service Worker - Health Psychology (60 credits) <i>Required courses</i> BIO131 Health Disease PSY266b Adult Aging PCS305b Cognition <i>Health Options- Take TWO</i> PSY328 Occupational Health PBI327a Psy. Nutrition PSY203a Sports: perform. PSY204b Sports: social PBI379a Neuropsychology Free options – Any SEVEN courses
9	24	3
3		3
6		3
3		9
15		6
		21

PROGRAMS FOR STUDENTS THAT HAVE COMPLETED SPECIFIC DEGREES AT GEORGIAN COLLEGE

<p>Child and Youth Worker - Clinical Psychology option (45 credits) AND Developmental Service Worker-Clinical Psychology option (60 credits)</p> <p><i>Required courses</i></p> <table> <tr> <td>PSY301a</td> <td>Abnormal Psy.</td> <td></td> </tr> <tr> <td>PSY311b</td> <td>Psychopathologies</td> <td></td> </tr> <tr> <td>PSY330a</td> <td>Psy. Ethics</td> <td>9</td> </tr> </table> <p><i>Physiological - Take ONE</i></p> <table> <tr> <td>PSY302a</td> <td>Perception</td> <td></td> </tr> <tr> <td>PBI327a</td> <td>Psy. Nutrition</td> <td></td> </tr> <tr> <td>PBI379a</td> <td>Neuropsychology</td> <td></td> </tr> <tr> <td>PBI380b</td> <td>Psychopharmacol</td> <td>3</td> </tr> </table> <p><i>Clinical Social - Take TWO</i></p> <table> <tr> <td>PSY214</td> <td>Community Psy.</td> <td></td> </tr> <tr> <td>PSY219b</td> <td>Psy. Women</td> <td></td> </tr> <tr> <td>PSY246b</td> <td>Social Psy. 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COURSES

Important note: PSY101 and PSY102 (or their collegial equivalents) are prerequisites for all the other courses in the Psychology program. However, PBI191 and 200-Level courses may be taken concurrently. Exemptions may be granted with the permission of the instructor.

The following list includes courses which are normally offered by the department each year, as well as courses which are offered on a rotating basis. Those courses which are given only irregularly are listed separately at the end of this section.

Psychology 101a Introduction to Psychology I : Basic Processes 3-3-0
An introduction to the functioning and development of the basic cognitive processes: perception, learning, memory, thinking, intelligence and consciousness. Approaches and methods will also be discussed.

Professor McKelvie or Professor Drumheller

Psychology 102b Introduction to Psychology II: Human Interactions 3-3-0
An introduction to motivation, emotion, and personality as factors in human functioning. Approaches, methodology, social psychology and abnormal psychology are also discussed.

Professor McKelvie or Professor Drumheller

Psychology Biology 191a Introductory Biology 3-3-0
Scientific method, chemistry of life, cell structure, cell metabolism, respiration, photosynthesis, transport systems, origin of life, evolution genetics, reproduction, taxonomy, diversity of life (including microorganisms, fungi, plants and animals), ecosystems. *This course cannot be taken for credit by students enrolled in the 3-year neuroscience program, nor can it be taken for credit by anyone who already has credit for BIO 193, BIO191 or PBI100.*

For the laboratory that goes with this course (BIL191a) see the Biology section of the calendar.

Note that BIL191a cannot be taken for credit by anyone who already has credit for BIL 193 or BIL 199.

Psychology 203a Sport Psychology: Performance Enhancement 3-3-0
A systematic review of how individual factors influence and optimize sports performance. Major topics include introduction and research methods, personality, mood, motivation, learning and cognition. Both theory and application will be emphasized. *Students who have taken PSY208 (Sports Psychology) cannot take this course for credit*
Professor McKelvie

Psychology 204b The Social Psychology of Sport and Exercise 3-3-0
A systematic review of the social aspects and effects of sport and exercise. Major topics include introduction and research methods, audience effects, leadership, team cohesion, aggression in athletes and fans, bias in judging, and benefits and costs of sports and exercise participation.
Professor McKelvie

Psychology 206a Personality I: Psychoanalytic and humanistic approaches 3-3-0
The fundamentals of psychoanalytic and humanistic thought as illustrated by theorists such as Freud, Jung, Adler, Horney, Erikson, Maslow and Rogers.
Students who have taken PSY107 (Personality) may not take this course for credits

Psychology 207b Personality II: Trait, learning and cognitive approaches 3-3-0
An examination of the bases of trait, social learning and cognitive personality theories. These perspectives are exemplified by the theories of Kelly, Bandura, Rotter, Allport and Cattell.

Students who have taken PSY107 (Personality) may not take this course for credits
Prerequisite : PSY 206

Psychology 213b Research Methods 3-2-2
Scientific bases of psychological theory; experimental and non experimental research methods; data analysis; report writing; critical analysis of published articles. Class projects are conducted, statistically analyzed, and written up.

Students who have taken PSY113 (Research Methods I) cannot take this course for credit

Prerequisite: PMA260a.

Corequisite: PMA360b

Professor McKelvie

Psychology Biology 217b Motivation and Emotion 3-3-0
An exploration of the underlying causes of human behavior. Topics include hunger and eating, sex and love, aggression, drug use/abuse and higher-level behaviors (e.g. creativity, attaining peak performance, goal setting, self-regulation). The role of emotions in guiding behavior will also be addressed.

Professor Bacon or Professor Drumheller

Psychology 219 Psychology of Women 3-3-0
In this course, gender stereotypes and biases are exposed while rape myths are debunked and sexual orientation is demystified. Gender comparisons in cognitive abilities and in social and personality characteristics are discussed. Other topics of interest include women and work, love relationships, sexuality, women and physical health, psychological disorders, sexual harassment and assault as well as physical abuse. This course is a must for those who enjoy class discussions!

Students who have taken PSY109 (Psychology of Women) cannot take this course for credit

Professor Charpentier

Psychology 236a Child Development I 3-3-0
The foundations of child development. Topics include basic genetics, prenatal development, birth, physical development, perceptual development, early learning and the classic theories of cognitive and socioemotional development.

Professor Bacon

Psychology 237b Child Development II 3-3-0
An in depth look at the cognitive and socioemotional development of infants and children. Topics include intelligence, memory and problem-solving skills, language and communication, development of the self, gender-role development, aggression, altruism, moral development and the influence of the family, school, peers and television on development.

Professor Bacon

Psychology Biology 241a Evolutionary Psychology 3-3-0
Evolutionary Psychology is the study of behavior founded within the framework of Darwin's Theory of Evolution through Natural Selection. The purpose of this course is to introduce the students to the principles of Evolutionary Psychology and to investigate the adaptive origins of many common behaviors such as cooperation, mating strategies, parenting, aggression and dominance.

Students who have taken PBI141 (Evolutionary Psychology) cannot take this course for credit

Professor Drumheller

Psychology 245a Social Psychology I 3-3-0
Methodology of social psychology; prejudice; sexism; social perception; attitude formation and attitude change; legal and clinical applications.

Professor Standing

Psychology 246b Social Psychology II 3-3-0
Social motives, such as aggression, attraction and altruism; group processes and social interaction; conformity and leadership; social institutions; environmental psychology.

Professor Standing

Psychology Mathematics 260a Psychological Statistics 3-2-1
Basic descriptive and inferential statistics developed from a conceptual perspective. Topics include measures of central tendency and variability, normal distribution, probability, confidence intervals, sampling distributions, hypothesis testing, power analysis, z-tests, t-tests and chi-square.

Students who have taken PMA160 (Psychological Statistics I) cannot take this course for credit

Students who have taken Physics 101a may not take this course for credit

Professor Stout

Psychology 266b Adult Development and Aging 3-3-0
An examination of psychological development during adulthood and old age. Research findings on age related changes in memory, health issues, adjustment, coping styles, and stress will be covered. Case studies will be used to explore various applications in society.

Professor Drumheller

Psychology Biology 275a Health Psychology I 3-3-0
Introduction to health psychology and the biopsychosocial model of health. Topics include: obtaining care and following health advice, the causes and consequences of stress, coping with pain, cardiovascular disease, behavioural factors in cancer, plus current issues in health.

Professor Standing

Psychology Biology 276b Health Psychology II 3-3-0

Selected topics in health psychology: methods of health research with emphasis on drug and cancer studies, chronic illness, preventing injuries, smoking tobacco, using alcohol and other drugs, diet and weight control, exercising, mental illness and health, death studies, history of medicine.

Professor Standing

Psychology Biology 288b Brain and Behavior I 3-3-0

An introduction to physiological psychology and to the complex relationship between brain activity and human behavior. Topics include structure and function of the brain, the neuron, neurotransmitters, neuroscience research methods and the physiology of the sensory and motor systems.

Students who have taken PBI288 (Physiological Bases of Behavior I) may not take this course for credit

Professor Bacon

Psychology 290b Adolescence 3-3-0

An examination of developmental issues in the adolescent period and related clinical phenomena: environmental influences (family, school, peers) and intra personal concerns (identity, sexuality, moral development); clinical conditions such as depression (suicide), eating disorders, and delinquency.

Psychology 301a Abnormal Psychology 3-3-0

An introduction to the experimental approaches, diagnoses, classifications, viewpoints, and therapeutic techniques used in abnormal psychology. Stress and adjustment disorders, eating disorders and substance-related disorders will be presented and discussed.

Students who have taken PSY341 (Abnormal Psychology) may not take this course for credits

Psychology 302b Perception 3-3-0

Based on a rich array of perceptual demonstrations, this course provides a comprehensive overview of how our senses, mostly vision and audition, allow us to know and understand the world. Topics include physiology of the sensory systems, perceiving objects and faces, color, depth and motion perception, visual illusions, music perception, perceptual illusions and perceptual impairments.

Prerequisite: PBI288b or permission of the instructor

Professor Standing or Professor Bacon

Psychology Computer Science 305b Cognition 3-3-0

Cognitive processes: language, memory, concepts, heuristics, the nature of thought, reasoning, problem solving, creativity, and anomalous beliefs.

Students who have taken PCS205 (Cognitive Psychology) cannot take this course for credit

Professor Standing

Psychology 311b Major Psychopathologies 3-3-0

This course follows abnormal psychology. Topics covered include organic and behavioural disorders, such as mood disorders, somatoform and dissociative disorders, personality disorders, sexual dysfunctions and deviations, schizophrenia, cognitive disorders as well as disorders of childhood and adolescence.

Students who have taken PSY341f (Abnormal Psychology) cannot take this course for credit

Prerequisite: PSY301

Psychology 313a Advanced Research Methods 3-2-2

Research methodology in the study of human behaviour. Formulation of the research proposal; presentation and discussion of results in APA format; factorial and correlational designs; computers in data analysis. Class and individual projects are conducted.

Students who have taken PSY215 (Research Methods II) cannot take this course for credit

Prerequisites: PSY213b, PMA260a and PMA360b

Professor Standing

Psychology 325a Independent Studies I 3-0-0

Theoretical or experimental work conducted under the direct supervision of two faculty members. The project and grading scheme needs to be approved beforehand by the Psychology Department.

Students who have taken PSY225 (Independent Studies I) cannot take this course for credit

Psychology 326b Independent Studies II 3-0-0

Theoretical or experimental work conducted under the direct supervision of two faculty members. The project and grading scheme needs to be approved beforehand by the Psychology Department.

Students who have taken PSY226 (Independent Studies II) cannot take this course for credit

Psychology Biology 327a Psychology of Nutrition 3-3-0

This course explores the many physiological, psychological and sociocultural factors that influence children and adults' food choice and preferences. The activity of eating is understood in its relation to physical and psychological health, body size and dissatisfaction, dieting, obesity, anorexia nervosa and bulimia nervosa.

Students who have taken PBI227 (Psychology of Nutrition) cannot take this course for credit

Professor Charpentier

Psychology 330 Psychology and Ethics 3-3-0

A wonderful way to learn how to think ethically in several areas of psychology. Students learn about the importance of fundamental ethical principles, values, theoretical and practical models of ethical decision-making and legal considerations, while engaged in the comparison of relevant ethics codes (with particular emphasis on the CPA code of ethics). Specialized topics include confidentiality, multiple relationships, the ethics of teaching, the ethics of counselling, the ethics of assessment, research ethics, and ethics in forensic settings. Class discussions are part and parcel of this course.

Professor Charpentier

Psychology 333a Psychology of Exceptional Children 3-3-0

A survey of various kinds of exceptionality in children, including intellectual disabilities, giftedness, speech and language differences, learning disabilities, hearing and vision impairments, behaviour disorders, health problems, and developmental disabilities.

Students who have taken PSY233 (Psy. of Exceptional Children) cannot take this course for credit

Psychology 336b The Clinical Interview 3-3-0

Techniques of clinical interviewing are explored by surveying various theories of change (psychoanalytic, existential, feminist, person-centered, cognitive-behavioral, reality, and postmodern). Emphasis is placed on the acquisition of both theoretical knowledge and practical skills that have direct relevance in applied settings. Class debates and discussions, role-playing, and use of video clips are pedagogical tools enjoyed by students.

Students who have taken PSY230 (Interviewing) cannot take this course for credit

Prerequisites: PSY206a and PSY207b

Co-requisite PMA353b or permission of the instructor

Professor Charpentier

Psychology 337a Crisis Intervention 3-3-0

Engaging class discussions, guest speakers, role plays, videos and practice-based lectures provide a framework for understanding what constitutes a crisis, various types of crises and key elements of crisis assessment and intervention that are practically relevant and that can be used in a variety of crisis situations. Specific crises examined include crises of lethality, conjugal violence, sexual assault, crises of loss and human-made disasters.

Students who have taken PSY231 (Crisis Intervention) cannot take this course for credit

Prerequisites: PSY206 and PSY207

Offered on a rotating basis

Professor Charpentier

Psychology 342a History of Psychology 3-3-0

An examination of the early conceptions of human nature that influenced psychology's development. The course is presented in two parts, the first examining the nature of history and the history of science. The second part explores the conception of humanity in ancient texts from Homer, Sophocles, Plato, Aristotle and Augustine.

Prerequisite: Open to students entering their third year

Professor Stout

Psychology Mathematics 353b**Psychometrics and Psychological Testing 3-3-0**

The psychometric properties of standard psychological tests: norms, reliability and validity. Critical examination of these properties for selected maximum and typical performance instruments.

Students who have taken PMA223 (Psychometrics) or PSY224 (Issues in Psychological Testing) cannot take this course for credit

Prerequisites: PSY213b and PMA260a

Professor McKelvie

Psychology Mathematics 360b**Advanced Psychological Statistics 3-3-0**

Advanced inferential statistics developed from a conceptual perspective. Topics include one and two-way analysis of variance, repeated measures anova, fixed and random designs, post-hoc and apriori tests. Explorations will also include correlation, regression and their relationship to anova and use of SPSS in analysis.

Students who have taken PMA161 (Psychological Statistics II) cannot take this course for credit

Prerequisite: PMA260a, or the Business (BMA140 or BMA141) or Physics (PHY101) equivalent.

Corequisite: PSY213b

Professor Stout

Psychology 370a Learning and Memory 3-3-0

A seminar course examining theories of learning and memory. The seminars follow a historical sequence examining changes in our understanding of learning and memory. Topics include classical conditioning, behavioural, cognitive and gestalt approaches to learning and memory.

Students who have taken PSY270 (Learning and Memory) cannot take this course for credit

Professor Stout

Psychology Biology 379a Clinical Neuropsychology 3-3-0

Neuropsychology is the study of the relationship between brain structures and behaviour. In this course we will explore the neuroanatomical correlates of both normal and abnormal behaviors in humans. Among the topics to be discussed are the behavioural sequelae of head injury, mood disorders associated with regional trauma and epilepsy, sex differences in cerebral organization, cerebral asymmetries, language and aphasia and the various disorders of perception. Depending on the interests of the students, special topics include dyslexia, alexithymia, Alzheimer's disease, alcoholism and schizophrenia.

Students who have taken PBI279 or BIO279 (Neuropsychology) may not take this course for credit

Prerequisite: PBI288b or permission of the instructor

Professor Drumheller

Psychology Biology 380b Psychopharmacology 3-3-0

This course is designed to introduce students in psychology and the natural sciences to the field of psychopharmacology. Emphasis will be placed on the relationships between psychoactive drugs, their mechanisms of action in the nervous system, and human behaviour. Following an analysis of the principles of pharmacology and pharmacokinetics, as well as the mechanisms of drug tolerance and dependence, the cognitive, emotional and behavioural aspects of specific classes of drugs will be examined. These classes of drugs will include sedatives, hypnotics; stimulants; narcotics; psychotomimetics, psychedelics and hallucinogens.

Students who have taken PBI280 or BIO280 (Psychopharmacology) may not take this course for credit

Prerequisite: PBI288b or permission of the instructor

Professor Drumheller

Psychology Biology 388a Brain and Behavior II 3-3-0

The physiological bases of motivated behavior (sleep, sex, hunger and thirst), emotions, learning/memory and language. The focus is on normal physiology but some aspects of abnormal physiology (e.g. amnesia, anxiety, schizophrenia) will be addressed.

Students who have taken PBI228 (Physiological Bases of Behavior II) cannot take this course for credit

Prerequisite: PBI288b or permission of the instructor

Professor Bacon

Psychology 440b Health Internship 3-3-0

The course will provide exposure to some practical aspects of the psychology of health. The student will be required to serve an internship for part of one day per week at a local health care facility or other approved institution (for a minimum of 36 hours in total), to attend regular meetings with the instructor, and to prepare a written final report that relates internship activities to issues taken from the academic literature.

Prerequisites: PBI275 (Health Psychology I) and PBI276 (Health Psychology II)

Professor Standing

Psychology 441a Advanced Clinical Seminar 3-1-2

As a link between The Clinical Interview (PSY336) and Clinical Practicum (PSY442), this course is taught as a series of student-led seminars on various clinical topics. Vigorous class debates, meaningful exchanges with guest speakers (from the community at large) and the opportunity to learn and apply basic interviewing skills with video tape feedback are all enriching aspects of this course. Students enrolled in a major program are welcome, providing that they have the prerequisites.

Prerequisites: PSY206, PSY207 and PSY336

Professor Charpentier

Psychology 442b Clinical Practicum 3-0-3

Aimed at providing students with hands-on experience, this course is completely practical: students spend 6 hrs/week under supervision in one of a number of applied settings. Field placements are possible in hospital and school settings, various community organizations, senior citizens' homes, alcohol and drug rehab centres, women's centres, etc., and are assigned in accordance with students' interests and competencies.

Prerequisite: PSY441

Professor Charpentier

Psychology 443b History of Psychology Seminar 3-3-0

A seminar course that examines the effects the scientific revolution on our conception of mind and psychology. The seminars are based on the writings of the Rationalists (Descartes, Spinoza, Leibniz), Empiricists (Locke, Berkeley, Hume) and those that reflect the emergence of Evolutionary thinking and its influences on our conceptions of mind/brain, consciousness and the nature of human science.

Students who have taken PSY343 (History of Psychology II) cannot take this course for credit

Prerequisite: PSY342

Professor Stout

Psychology Mathematics 460b Multivariate Statistics 3-3-0

An examination of multivariate statistical approaches to research. Topics include multiple correlation, regression, partial & semipartial analysis, stepwise regression, statistical control, hierarchical modeling, multiple regression with categorical and continuous variables, analysis of covariance, and multivariate analysis of variance.

Students who have taken PMA261 (Multivariate Statistics) cannot take this course for credit

Prerequisite: PMA360

Professor Stout

Psychology 498a Honours Seminar 3-3-0

This seminar aims at exploring cutting-edge issues in Psychological Science. Selected topics from these areas are presented and critically discussed. The course will also guide students as they get their Honours Thesis under way and address practical issues such as applications to graduate school, scholarship applications, GREs and career planning. *Students who have taken PSY449 (Honours Seminar: Advanced Topics) cannot take this course for credit*

Prerequisite: Only open to Honours students

Co-requisite: PSY499f

Professor Bacon

Psychology 499f Honours Thesis 6-0-0

Under the guidance of two faculty advisors, the student will formulate a proposal for original research involving the collection of data, undertake the research, and report it both as a public talk and in the form of a dissertation conforming to the publication style of the American Psychological Association.

Students who have taken PSY450 (Dissertation) cannot take this course for credit

Prerequisite: Only open to Honours students;

Co-requisite: PSY498

PMA 460b is an additional prerequisite for projects involving multivariate research.

Cognate Courses

These courses may count for Psychology credit.

BHR 221a	Organizational Behavior	3-3-0
EDU 301a	Educational Psychology	3-3-0
PHI 252b	Philosophy of Mind	3-3-0
REL 148a	Psychology of Religion	3-3-0

Courses offered on an irregular basis.

Psychology 210 Psychology of the Couple 3-3-0
This course is a survey of research on the psychology of the couple. Topics treated include: psychology of the female and male; factors in partner choice; bonding and love; commitment and contract; stages of coupling; divorce and recommitment. Psychodynamic, behavioural and systemic approaches to couple therapy will be examined.

Psychology 214 Community Psychology 3-3-0
Community Psychology is the study and application of psychological solutions to community-based problems. Through an analysis of the reciprocal relationship between person and environment (clubs, churches, schools, neighborhood, larger culture) Community Psychology emphasizes action and interventions whose aim is to prevent problems in living, promote social-psychological competencies and improve people's well-being. This course introduces students to the ways in which research and science intersect with the practical aspects of working successfully with people in their communities. Topics include the background and history of the field, community research methods, empowerment of disenfranchised groups, social support, cultural diversity, prevention, program evaluation and development of community intervention strategies.

Psychology 222 Group Dynamics and Therapy 3-3-0
This course introduces students to the principles and practices of group behavior, emphasizing dynamic processes (norms, roles, relations, development, social influence) which form a basis for group therapy as a branch of psychotherapy. Background, founders and key influences, contexts of use, techniques, methodology and current trends in group therapy will be discussed.

Psychology 277 Physical and Mental Health 3-3-0
This course will examine the mutual interaction between physical and mental health, using the biopsychosocial model as a conceptual framework. For example, depression as a factor in cardiovascular disease (and vice-versa), or the effect of diet upon behaviour disorders, will be explored with detailed attention to genetic, developmental, personality, lifestyle and social factors. Therapeutic interventions will also be covered, for example to compare the success of behavioural versus medical approaches in the treatment of depression. The course will include lectures and seminar presentations

Psychology 285 Psychology of Reading and Reading Disability 3-3-0
The aim of this course is to consider the psychological processes involved when we read. In particular, the skills that are acquired, the mechanisms involved, and the abilities that are essential will be examined. Why some people fail to acquire reading skills will also be examined. Answers to this question will focus on theoretical approaches to reading disability, and to the question of why some methods of remediation are successful.

Psychology 293 Multicultural Psychology 3-3-0
The place of culture in the evolution of psychology. Cultural similarities and differences in behaviour, thoughts, emotions, attitudes, motivations, mental and physical health, etc. Understanding that psychological principles can range from being universal to culture-specific.

Psychology 309 Industrial and Organizational Psychology 3-3-0
This course introduces students to theories and applications of psychology to human resource concerns in organizations. Topics include: Personnel recruitment, selection, training and performance appraisal; motivation; work attitudes; leadership; group behaviour; and other special topics (e.g., work related stress, applied ethics, and organizational conflict)

Students who have taken BHR221 cannot take this course for credit

Psychology Biology 320 Physiology and Pharmacology of Aging 3-3-0
The major physiological systems will be reviewed, with emphasis on how these systems change during the aging process and how these changes affect the individual's everyday functioning. Topics will include the cardiovascular system; respiratory system; metabolic regulation, digestion and absorption; and electrolyte and mineralocorticoid regulation. A review of basic pharmacological principles and mechanisms of action will follow this. Finally, we will discuss how the aging process interacts with various types of medications most frequently prescribed to elderly people, and some common idiosyncratic reactions seen in the elderly. Also, the special precautions which must be observed in prescribing and administering drugs to the elderly will be outlined.

Psychology 328 Occupational Health Psychology 3-3-0
This course examines the psychology related to developing and improving the physical and psychological well-being of individuals at work. Occupational health psychology is a developing field that uses psychology's particular understanding of individuals in combination with the expertise from other fields such as medicine, public health and engineering to help achieve safe, healthy and enriched work. Topics include a review of the types of mental health and well-being issues at work; the psychological approaches to occupational stress, health and safety; and an overview of programs and methods used to enhance well-being at work.

Psychology 329a Applied Memory and Cognition 3-3-0
Examination of memory and cognitive processes in everyday life, including specific settings (e.g., education, consumer, clinical, legal). Factors leading to high levels of performance and to slips and errors.

Students who have taken PSY229 (Applied Memory and Cognition) cannot take this course for credit

Professor McKelvie

Psychology 345 Family Dynamics and Therapy 3-3-0
A critical survey of major theories of family dynamics and family therapy, including psychoanalytic; existential, systemic, structural, and strategic approaches. The course also aims to further the student's understanding of his or her own family system through individual and group exercises.

Psychology 350 Environmental Psychology 3-3-0
Influence of the physical and cultural environment on behaviour, including factors such as heat, noise, crowding, traffic, buildings and urban design. Costs and benefits of city and rural lifestyles. Technology and the working environment. Population, resources and environment.

Psychology Biology 361 The Psychology of Sexuality 3-3-0
Various aspects of human sexuality from a psychological perspective. Includes the following topics: sexuality in childhood, adolescence, and early through late adulthood; sex differences; androgyny; transsexualism; sexual dysfunction and sex therapy; sexuality in the chronically ill and disabled; homosexuality and bisexuality; historical and cross cultural sexual attitudes and practices.

Psychology 367 Counselling of Older Adults 3-3-0
This course will introduce the student to the basic principles of counselling aged clients. The primary focus will be on the examination of the most common issues such as: various types of loss, remarriage, intergenerational conflicts, alcoholism, isolation, suicide, elderly abuse, as well as the intervention strategies used.

Psychology 386 Psychology of Language 3-3-0
The aim of this course is to provide students with a broad introduction to psychological phenomena in language acquisition and use. The structure of language and speech will be described briefly. Emphasis will be placed on a number of topics, including; language development, perception of language, word meaning and semantic memory, syntax and discourse processing, language production and conversational interaction, cultural influences and bilingualism, and language errors and disorders.

Psychology 408 Psychology of Consciousness 3-3-0
A critical examination of consciousness in scientific psychology. Major topics are the nature of consciousness (e.g., consciousness and brain, states of consciousness), the methodology for studying consciousness (e.g., introspection), and the function of conscious experience (e.g., free will, conscious processing in cognition).

Sociology

“The Department of Sociology is a very collegial environment for faculty and students. Both permanent and contract faculty demonstrated considerable loyalty to their colleagues and to the program. Students seem genuinely satisfied, indeed pleased, with the education they are receiving and they expressed great respect and admiration for the faculty. All professors seem truly committed to teaching and they take their role as mentors very seriously.”

—External Consultants Report to Bishop's
(SPARC Program Review) February, 2005

The Department of Sociology provides students with theoretical and methodological tools and substantive insights which can assist them in understanding social life, social organization, and action. The program is designed to provide students with a broad intellectual and sociological background which will help prepare them for a variety of careers and for advanced study at graduate school. The small size of our program and the dedication of our faculty, allow us to provide personal attention to students and extensive access to faculty. Through required courses and study concentrations, students are given substantial flexibility in meeting individual intellectual pursuits and preparation for satisfying employment after university. We offer a minor, major or honours in Sociology as well as six programs that allow students to concentrate their studies (see down: “Areas of Concentration in Sociology”). Students are encouraged to participate in the Experiential Learning program which is linked to their academic field of studies and involves course work and placement in an organization

The subject matter of our courses ranges widely from theoretical to applied study and our professors employ diverse pedagogies to facilitate student learning. The department has particular strengths of faculty expertise in globalization, criminology, law and social policy, aging, health, family, media, the arts, communications, culture, classical and contemporary theory, deviance, community, Canadian and Quebec societies, qualitative and quantitative methods of research, political sociology, sociology of organizations, race and ethnicity, sex and gender relations, collective behavior, social movements, technology, urban sociology, policy, poverty and homelessness, indigenous cultures and sustainable societies.

CAREERS IN SOCIOLOGY

Recent graduates of the program have gone in many directions including: management and business; education; media, communications, public relations and journalism; policing and corrections; health and social services; a wide variety of careers in both the private and public sector; graduate degrees in Sociology, and related disciplines and in law and other professional schools. To view an extensive list of career options and to contact graduates of our program please consult our departmental website at:

<http://www.ubishops.ca/ccc/div/soc/soc/>

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THE SOCIOLOGY PROGRAMS:

I. The MAJOR in Sociology (without concentration) consists of 42 credits: all new students will enter the department with a major in Sociology and will be encouraged by the end of their first year to enter a concentration(s).

18 credits are required: SOC 101 (Canadian Society), SOC 102 (Quebec Society), SOC 110 (Research Methodology), SOC 111 (Data Collection / Analysis), SOC 221 (Classical Sociology) and SOC 222 (Dialectical Reasoning). Majors and Honours in Sociology should complete these six required courses in their first two years. Majors seriously considering graduate school should complete an Honours in Sociology.

During the first year, students should complete SOC 101 and SOC 110 in the Fall term, during the Winter term of the first year, students should complete SOC 102 and SOC 111.

The remaining 24 credits of the Major are **electives** and may be chosen from any SOC course listed. The student may request up to 6 credits from other disciplines be considered (by the Chair) for **cognate credit** in the Major or Honours in Sociology. Any student who wishes **exemption** from a requirement should submit a request and relevant documentation (course outlines) to the Department Chair and the professor of the course before registration is completed.

II. The HONOURS in Sociology

The **HONOURS in Sociology** (without concentration) consists of 60 credits.

33 credits are required: Year One, Fall Term: SOC 101 (Canadian Society) and SOC 110 Research Methodology), Winter Term: SOC 102 (Quebec Society), SOC 111 (Data Collection / Analysis). In the second year, students should complete SOC 221 (Classical Sociology) in the Fall term and SOC 222 (Dialectical Reasoning) in the Winter term. Honours students must also complete SOC 290 (Contemporary Theory), SOC 311 (Quantitative Tools) and one of the following advanced seminars: SOC 301 (Aspects of Sociological Inquiry), SOC 315 (Political Sociology in the Digital Era), SOC 320 (Knowledge), SOC 322 (Urban Sociology), SOC 340 (Women: Theory and Ideology), SOC 390 (Social Justice and Contemporary Theory), SOC 395 (Advanced Theories of Social Sustainability), SOC 396 (Post Colonial Theory). To qualify for 300-level Sociology courses, a student must first pass 6 Sociology courses.

In the final year of the Honours Program (Year 3 or 4, whichever is last), students are required to complete SOC 402 (Honours I) and SOC 404 (Honours II). The **Thesis** is optional (6 credits, and done in the final year of Honours). The Department reserves the right to review the overall academic performance and integrity of students in its programs. Students wishing to graduate with an Honours degree combined with any concentration should consult the list of concentrations (below) for additional requirements. An Honours / concentration in any area includes 42 required credits, 15 credits in electives from the specific list for the area of concentration (see down), and 3 other elective credits in Sociology.

III. Areas of Concentration in Sociology:

A Major in Sociology / Concentration consists of 42 credits

An Honours in Sociology / Concentration consists of 60 credits.

There are six areas of concentration which Honours and Majors may choose. Students will have no more than two areas of concentration.

Each area of **Major / Concentration** differs from a **Major (without concentration)** in that: 1) 30 credits are **required**, and 2) 12 credits in **electives** must be selected from a specific list for the area of concentration.

Each area of **Honours / Concentration** differs from an **Honours (without concentration)** in that: 42 credits are required and 2) 15 credits of the 18 credits in electives must be chosen from a specific list for the area of concentration.

A) Concentration in Global Studies and Empire [Concentration Coordinator: Dr. Mary Ellen Donnan]

(i) Major in Sociology / Concentration in Global Studies and Empire (42 credits).

30 credits are required: SOC 101 (Canadian Society), SOC 102 (Quebec Society), SOC 110 (Research Methodology), SOC 111 (Data Collection / Analysis), SOC 190 (Introduction to Post Colonial Study), SOC 221 (Classical Sociology), SOC 222 (Dialectical Reasoning), SOC 296 (Globalism and Culture), SOC 309 (Advanced Seminar in Global Colonization and Decolonization) and SOC 396 (Post Colonial Theory).

Majors concentrating in Global Studies and Empire must also complete 12 credits from the following list of elective courses in this concentration.

(ii) Honours in Sociology / Concentration in Global Studies and Empire (60 credits) Honours in this concentration are required to complete the required courses for the Major / Concentration in Global Studies and Empire and are also required to complete SOC 320, SOC 311, SOC 402 and SOC 404.

Honours concentrating in Global Studies and Empire must also complete 15 credits from the following list of elective courses in this concentration and 3 credits in open electives in Sociology:

Elective courses for the Honours or Major / Concentration in Global Studies and Empire:

- ENG 229 Studies in Postcolonial Literatures: India
- ENG 230 Studies in Postcolonial Literatures: Africa
- ENG 231 Studies in Postcolonial Literatures: The Caribbean
- ENG 242 Studies in Comparative Literature: World Perspectives on Liberty and Oppression
- HIS 272 History of Modern India
- HIS 276 A History of Modern Africa
- HIS 281 Pre-Colonial Africa
- HIS 328 Native/Settler Relations in Canada
- HIS 370 The Americas: A Comparative Colonial History
- POL 140 International Relations
- POL 234 Politics of Africa
- POL 242 International Organizations
- POL 317 Globalization and the Canadian State
- REL 124 World Religions III: Hinduism
- REL 125 World Religions IV: Buddhism
- REL 127 World Religions VI: Islam
- SOC 107 Canadian First Nations
- SOC 202 Directed Independent Study I
- SOC 203 Directed Independent Study II
- SOC 207 North American First Nations
- SOC 225 Quebec Society II

SOC 229 Communication, Gender and Culture
 SOC 241 Cinema
 SOC 245 Race and Ethnicity
 SOC 250 Collective Behaviour
 SOC 290 Contemporary Theory
 SOC 294 Sociology of Tourism
 SOC 302 Directed Independent Study III
 SOC 303 Directed Independent Study IV
 SOC 315 Political Sociology in the Digital Era
 SOC 320 Knowledge (Required of Honours)
 WOM 101 Introduction to Women's Studies
 WOM 305 Women and Feminism: Selected Topics
 ELL 200 Experiential Learning Lab
 ELP 300 Experiential Learning Placement

B) Concentration in Criminology, Law, and Social Policy
[Concentration Coordinator: Professor Caroline Viens]

(i) Major in Sociology / Concentration in Criminology, Law, and Social Policy (42 credits).

30 credits are required: SOC 101 (Canadian Society), SOC 102 (Quebec Society), SOC 110 (Research Methodology), SOC 111 (Data Collection / Analysis), SOC 208 (Criminology), SOC 221 (Classical Sociology), SOC 222 (Dialectical Reasoning), SOC 230 (Deviance I), SOC 292 (Social Policy) and SOC 306 (Sociology of Health).

Majors concentrating in Criminology, Law, and Social Policy must also complete 12 credits from the following list of elective courses in this concentration.

(ii) Honours in Sociology / Concentration in Criminology, Law, and Social Policy (60 credits). Honours in this concentration are required to complete the required courses for the Major / concentration in Criminology, Law, plus Social Policy and SOC 311, SOC 402 and SOC 404. Honours in this concentration are also required to complete one of SOC 235 (Women and the Penal System) or SOC 331 (Deviance II).

Honours concentrating in Criminology, Law and Social Policy must also complete 15 credits from the following list of elective courses and 3 credits in open electives in Sociology:

Elective courses for the Honours or Major / Concentration in Criminology, Law and Social Policy :

ECO 126 Economics of Crime and Criminal Justice
 ESG 350 Environmental Justice
 PHI 140 Introduction to Ethics
 POL 173 US Government and Public Policy
 POL 314 Law, Politics and Canadian Society
 POL 345 Introduction to Public International Law
 PMA 160 Psychological Statistics
 PMA 260 Advanced Psychological Statistics
 SOC 105 Media and Society
 SOC 155 Sociology of Sport
 SOC 202 Directed Independent Study I
 SOC 203 Directed Independent Study II
 SOC 205 Family I
 SOC 209 Young Offenders
 SOC 214 Aging

SOC 215 Culture, Ethnicity and Aging
 SOC 217 Social Policy of Aging
 SOC 220 Work and Leisure
 SOC 235 Women and the Penal System (*see requirements for Honours in this concentration*)
 SOC 245 Race and Ethnicity
 SOC 250 Collective Behaviour
 SOC 260 Community
 SOC 292 Social Policy
 SOC 299 Education
 SOC 281 Communications Methods
 SOC 302 Directed Independent Study III
 SOC 303 Directed Independent Study IV
 SOC 305 Family II
 SOC 308 Formal Organization
 SOC 307 Sociology of Health
 SOC 311 Quantitative Tools for Social Research (*see requirements for Honours in this concentration*)
 SOC 315 Political Sociology in the Digital Era
 SOC 321 Sociology of Technology
 SOC 322 Urban Sociology
 SOC 331 Deviance II (*see requirements for Honours in this concentration*)
 SOC 340 Women: Theory and Ideology
 SOC 381 Media and the Environment
 SOC 390 Social Justice and Contemporary Theory
 WOM 120 Women and The Law
 WOM 101 Introduction to Women's Studies
 ELL 200 Experiential Learning Lab
 ELP 300 Experiential Learning Placement

C) Concentration in Media, Technology, and Contemporary Studies. [Concentration Coordinator: Dr. Gerry Coulter]

(i) Major in Sociology / Concentration in Media, Technology, and Contemporary Studies (42 credits).

30 credits are required: SOC 101 (Canadian Society), SOC 102 (Quebec Society), SOC 110 (Research Methodology), SOC 111 (Data Collection / Analysis), SOC 221 (Classical Sociology), SOC 222 (Dialectical Reasoning), SOC 105 (Media and Society), SOC 315 (Political Sociology in the Digital Era) plus two from: SOC 320 (Knowledge), SOC 381 (Media and the Environment), SOC 321 Sociology of Technology).

Majors concentrating in Media, Technology, and Contemporary Studies must also complete 12 credits from the following list of elective courses in this concentration.

(ii) Honours in Sociology / Concentration in Media, Technology, and Contemporary Studies (60 credits). Honours in this concentration are required to complete the required courses for the Major / Concentration in Media, Technology, and Contemporary Studies, and SOC 311, SOC 402 and SOC 404, and are also required to complete either SOC 395 (Advanced Theories of Social Sustainability) or SOC 322 Urban Studies.

Honours concentrating in Media, Technology, and Contemporary Studies must also complete 15 credits from the following list of elective courses and 3 credits in open electives in Sociology:

Elective courses for the Honours or Major / Concentration in Media, Technology, and Contemporary Studies:

BIO 138 The Genetics Revolution
 CLA 128 The City in the Ancient World
 CLA 212 Classical Mythology I
 CLA 213 Classical Mythology II
 CLA 250 Women in the Ancient World
 CLA 350 The Goddess: History, Cult and Myth
 CSC 102 Essentials of Computing on the PC for Non-Scientists
 DRA 170 Introduction to Film
 DRA 202 Contemporary American Drama
 DRA 203 Contemporary European Drama
 DRA 230 Women in Performance
 DRA 273 Women Dramatists
 DRA 300 Contemporary Theatre Practice
 DRA 301 Contemporary Dramatic Theory
 DRA 319 Film Criticism and Theory
 DRA 322 Topics in Shakespeare
 ENG 102 Approaches to Media Studies
 ENG 211 Cultural Spaces of Childhood
 ENG 233 History of Literary Criticism
 ENG 234 Contemporary Literary Theory
 ENG 235 Cultural Studies: History, Theory and Practice
 ENG 236 Popular Culture
 ENG 287 Image and Communication
 ENG 291 Film Theory
 FIH 108 History of Photography
 FIH 223 Art and Art Criticism in France
 FIH 235 Museology
 FIH 250 Women in Art
 FIH 310 Current Issues in the Theory and Criticism of Art
 FRA 181 Histoire socio-culturelle du Québec I
 FRA 182 Histoire socio-culturelle du Québec II
 FRA 261 Le Théâtre du XVII-XIX siècle
 FRA 283 Théâtre québécois
 FRA 285 Romain québécois contemporain
 FRA 384 Poésie et chanson du Québec
 HIS 371 A History of Communications
 MUS 104 History and Analysis of Jazz 1945-Present
 MUS 110 The Art of Listening I
 POL 221 Political Communication and Rhetoric
 POL 222 Politics and the Arts
 POL 420 Modern Political Thought
 POL 421 Advanced Political Thought
 PHI 170 Introduction to the Philosophy of Knowledge
 PHI 246 Philosophy of Art
 PHI 247 Philosophy and Film
 PHI 364 Post Modernism
 SOC 100 Sociological Imagination
 SOC 241 Cinema
 SOC 291 Sociology of Art
 SOC 293 Visual Sociology
 ELL 200 Experiential Learning Lab
 ELP 300 Experiential Learning Placement

D) Concentration in Gender, Diversity and Equity Studies. (Formerly Women's Studies) [Concentration Coordinator: Dr. Cheryl Gosselin]

(i) Major in Sociology / Concentration in Gender, Diversity and Equity Studies (42 credits).

30 credits are required: SOC 101 (Canadian Society), SOC 102 (Quebec Society), SOC 110 (Research Methodology), SOC 111 (Data Collection / Analysis), SOC 129 (Sex and Gender), SOC 221 (Classical Sociology), SOC 222 (Dialectical Reasoning), SOC 245 (Race and Ethnicity), WOM 101 (Introduction to Women's Studies), WOM 201 (Women and Feminism in Canada).

Majors concentrating in Gender, Diversity and Equity Studies must also complete 12 credits from the following list of elective courses in this concentration.

(ii) Honours in Sociology / Concentration in Gender, Diversity and Equity Studies (60 credits). Honours in this concentration are required to complete the required courses of the Major Concentration in Gender, Diversity and Equity Studies, plus SOC 311, SOC 402 and SOC 404, and are also required to complete WOM 305 (Women and Feminism, Selected Topics).

Honours concentrating in Gender, Diversity and Equity Studies must also complete 15 credits from the following list of elective courses and 3 credits in open electives in Sociology:

Elective courses for the Honours or Major / Concentration in Gender, Diversity and Equity Studies:

WOM 120 Women and The Law
 WOM 301 Directed Independent Study
 WOM 305 Women and Feminism: Selected Topics (see requirements for Honours in this concentration)
 CLA 250 Sex and Gender in the Ancient World
 CLA 350 The Goddess: History, Cult and Myth
 DRA 202 Contemporary American Drama
 DRA 203 Contemporary European Drama
 DRA 212 Theatre of the State
 DRA 273 Women Dramatists
 DRA 237 Theatre Lab
 DRA 322 Topics in Shakespeare
 DRA 230 Women in Performance
 ENG 115 Women Writers Before 1900
 ENG 239 Feminist Literary Theory
 ENG 247 Modern American Poetry II
 ENG 275 Canadian Novel II
 FIH 250 Women in Art
 FRA 263 De la féminité au féminisme
 FRA 284 L'inscription du féminin: littérature québécoise
 HIS 331 Women in 19th and 20th Century Canada
 HIS 380 Women in Modern British History
 PHI 144 Introduction to the Philosophy of Sexuality
 PBI 361 The Psychology of Sexuality
 PSY 210 Psychology of the Couple
 PSY 219 Psychology of Women
 PSY 293 Multicultural Psychology
 PSY 337 Crisis Intervention

PSY 345 Family Dynamics and Therapy
 REL 146 Women in Religion
 SOC105 Media and Society
 SOC 202 Directed Independent Study I
 SOC 203 Directed Independent Study II
 SOC 205 Family I
 SOC 207 North American First Nations
 SOC 214 Aging
 SOC 215 Culture, Ethnicity and Aging
 SOC 217 Social Policy of Aging
 SOC 229 Communication, Gender and Culture
 SOC 223 Women and Global Inequality
 SOC 235 Women and the Penal System
 SOC 245 Race and Ethnicity
 SOC 250 Collective Behaviour
 SOC 290 Contemporary Theory
 SOC 292 Social Policy
 SOC 294 Sociology of Tourism
 SOC 299 Sociology of Education
 SOC 302 Directed Independent Study III
 SOC 303 Directed Independent Study IV
 SOC 305 Family II
 SOC 307 Sociology of Health
 SOC 320 Knowledge
 SOC 322 Urban Sociology
 SOC 340 Women, Theory and Ideology
 ELL 200 Experiential Learning Lab
 ELP 300 Experiential Learning Placement

E) Concentration in Social Sustainability. [Concentration Coordinator: Dr. Michael Lustigman and Dr. Loretta Czernis]

(i) Major in Sociology / Concentration in Social Sustainability (42 credits).

30 credits are required: SOC 101 (Canadian Society), SOC 102 (Quebec Society), SOC 107 (Canadian First Nations), SOC 110 (Research Methodology), SOC 111 (Data Collection / Analysis), SOC 221 (Classical Sociology), SOC 222 (Dialectical Reasoning), SOC 295 (Sustainable Societies), SOC 381 (Media and the Environment), SOC 395 (Advanced Theories of Social Sustainability).

Majors concentrating in Social Sustainability must also complete 12 credits from the following list of elective courses in this concentration

(ii) Honours in Sociology / Concentration in Social Sustainability are required to complete the required courses in the Major / Concentration in Social Sustainability, plus SOC 311, SOC 402 and SOC 404, and are also required to complete SOC 315 (Political Sociology in the Digital Era).

Honours concentrating in Social Sustainability must also complete 15 credits from the following list of elective courses and 3 credits in open electives in Sociology:

Elective courses for the Honours or Major / Concentration in Social Sustainability:

BIO 117 General Ecology
 CHE 131 Liberal Arts Chemistry:
 The Chemistry of Everyday Life
 ECO 237 Economics of the Environment
 ESG 100 Introduction to Environmental Studies
 ESG 126 Introduction to Human Geography
 ESG 224 Human Impact on the Environment
 ESG 266 Environmental Policy
 ESG 268 The Human Landscape and Environmental Change
 ESG 350 Environmental Justice
 HIS 330 Field Trips into Canadian History:
 Society and the Environment
 SOC 202 Directed Independent Study I
 SOC 203 Directed Independent Study II
 SOC 207 North American First Nations
 SOC 245 Race and Ethnicity
 SOC 250 Collective Behaviour
 SOC 292 Social Policy
 SOC 294 Sociology of Tourism
 SOC 296 Globalism and Culture
 SOC 302 Directed Independent Study III
 SOC 303 Directed Independent Study IV
 SOC 307 Sociology of Health
 SOC 309 Advanced Seminar in Colonization and Decolonization
 SOC 315 Political Sociology in the Digital Era (see requirements for Honours in this concentration)
 SOC 320 Knowledge
 SOC 396 Post Colonial Theory
 ELL 200 Experiential Learning Lab
 ELP 300 Experiential Learning Placement

F) Honours or Major / Family, Health, and Community [Concentration Coordinator: Dr. Michael Lustigman and Professor Norma Husk]

(i) Major in Sociology / Concentration in Family, Health, and Community (42 credits).

30 credits are required: SOC 101 (Canadian Society), SOC 102 (Quebec Society), SOC 110 (Research Methodology), SOC 111 (Data Collection / Analysis), SOC 221 (Classical Sociology), SOC 222 (Dialectical Reasoning), SOC 205 (Family 1), SOC 214 (Aging), SOC 260 (Community) and SOC 307 (Sociology of Health)

Majors concentrating in Family, Health, and Community must also complete 12 credits from the following list of electives in this concentration

(ii) Honours in Sociology / Concentration in Family, Health, and Community (60 credits). Honours in this concentration are required to complete the required courses in the Major Concentration in Family, Health and Community, plus SOC 311, SOC 402 and SOC 404, and are also required to complete SOC305 (Family 2).

Honours concentrating in Family, Health, and Community must also complete 15 credits from the following list of elective courses and 3 credits in open electives in Sociology:

Elective courses for Honours or Major / Concentration in Family, Health and Community

BIO 138	The Genetics Revolution
ENG 210	History of Children's Literature
ENG 211	Cultural Spaces of Childhood
EDU 320	Education and Aging
HIS 368	The Young in Western Society
PBI 320	Physiology and Pharmacology of Aging
PSY 210	Psychology of the Couple
PSY 219	Psychology of Women
PSY 236	Child Development I
PSY 237	Child Development II
PSY 266	Adult Development and Aging
PSY 290	Adolescence
PSY 337	Crisis Intervention
PSY 361	The Psychology of Sexuality
PSY 367	Counselling of Older Adults
PSY 345	Family Dynamics and Therapy
GRN 300	Selected Topics in Aging
SOC 107	Canadian First Nations
SOC 129	Sociology of Sex and Gender
SOC 155	Sociology of Sport
SOC 202	Directed Independent Study I
SOC 203	Directed Independent Study II
SOC 209	Young Offenders
SOC 215	Culture, Ethnicity and Aging
SOC 217	Social Policy of Aging
SOC 219	Sociology of the Body
SOC 220	Work and Leisure
SOC 223	Women and Global Inequality
SOC 229	Gender, Communications and Culture
SOC 235	Women and the Penal System
SOC 245	Race and Ethnicity
SOC 280	Interpersonal Communications
SOC 299	Sociology of Education
SOC 292	Social Policy
SOC 308	Formal Organization
SOC 302	Directed Independent Study III
SOC 303	Directed Independent Study IV
SOC 322	Urban Sociology
SOC 340	Women, Theory and Ideology
WOM 101	Introduction to Women's Studies
WOM 120	Women and the Law
WOM 201	Women and Feminism
WOM 305	Women and Feminism: Selected Topics
WOM 301	Directed Independent Study
ELL 200	Experiential Learning Lab
ELP 300	Experiential Learning Placement

MINORS (for non-Sociology students) AND CERTIFICATE PROGRAMS IN SOCIOLOGY

The **Minor in Sociology** consists of 24 credits: SOC 100 (The Sociological Imagination) and SOC 101 (Canadian Society), are **required**. The remainder of the MINOR consists of any six elective courses in **Sociology**.

The Minor in Criminology

Program Description:

We offer a number of courses germane to the pursuit of a degree in criminology. Many criminology programs originated in, and take for granted, sociological research, theories and methods. The minor in criminology offers sufficient expertise to pursue graduate work in criminology and related careers, particularly when combined with a major or honours in sociology or another related discipline. Students consult with the Department Chair and Calendar course descriptions to assure completion of program outlined below. No limitation on cross-counting of courses between this and other programs is in effect.

The Criminology Minor involves 24 credits:

a) Required courses (9 credits):

SOC 208 Criminology (3-credits), and

Two methods courses (6-credits), to be chosen from these options:

SOC 110	Research Methodology
SOC 111	Data Collection and Analysis
SOC 311	Quantitative Tools for Social Research
PMA 160	Psychological Statistics
PMA 260	Advanced Psychological Statistics

b) Elective courses (15-credits) may be chosen from the following options:

SOC 101	Canadian Society
SOC 102	Quebec Society I
SOC 207	North American First Nations
SOC 209	Young Offenders
SOC 230	Deviance I
SOC 235	Women in the Penal System
SOC 245	Race & Ethnicity
WOM 120	Women & the Law
SOC 315	Political Sociology
SOC 331	Deviance II: Selected Topics
SOC 390	Social Justice & Contemporary Theory
POL 314	Law, Politics & Canadian Society
ECO 126	Economics of Crime and Criminal Justice

The Minor in Gerontology

Gerontology Minor and Certificate programs are possible options at Bishop's.

The Gerontology Minor is 24 credits:

Required are 12 credits: SOC 110, SOC 111, SOC 214, PSY 266.

Electives are chosen from the list below.

Electives for the Minor or Certificate may be chosen from these:

- BHR 221 Organizational Behaviour
- EDU 320 Education & Aging
- GRN 300 Selected Topics in Aging
(*required of Major/Option only*)
- GRN 301 Directed Indep. Studies
(*required of Major/Option only*)
- PSY 266 Adult Development and Aging (*required*)
- PSY 367 Counselling of Older Adults
- SOC 110 Research Methodology (*required*)
- SOC 111 Data Collection/Analysis (*required*)
- SOC 205 Family I
- SOC 214 (Sociology of) Aging (*required*)
- SOC 215 Culture, Ethnicity & Aging
- SOC 217 Social Policy of Aging (*formerly POL 217*)
- SOC 260 Community
- SOC 280 Interpersonal Communication
- SOC 305 Family II: Selected Topics
- SOC 361 Ethnographics

The Certificate in Gerontology - Sociology Department

30 credits

Description and objectives:

This program in Gerontology is presented from a multidisciplinary perspective. Its bio-psycho-social approach will provide persons currently working or planning to work with the elderly with the theoretical and practical knowledge and skills necessary to deal effectively with the needs of our aging population.

Admission requirements: (*See Regulations for Certificate Programs*)

Program structure:

Required courses: (24 credits)

- SOC 214 Aging
- PSY 266 Adult Development and Aging
- BHR 221 Organizational Behaviour
- SOC 110 Research Methodology

OR

- SOC 111 Data Collection-Analysis
- PBI 320 Physiology and Pharmacology of Aging
- PSY 367 Counselling of Older Adults
- GRN 300 Special Topics in Aging
- EDU 320ab Education and Aging

The remaining 6 credits may be chosen from the following optional courses:

- SOC 217 Social Policy of Aging
- SOC 215 Culture, Ethnicity and Aging

GENDER DIVERSITY & EQUITY STUDIES PROGRAMS:

The first is the **Minor in Gender, Diversity & Equity Studies**, consisting of a minimum of 24 credits (see course list from Gender Diversity & Equity Concentration) and WOM 101 is required. The **Certificate or Diploma** in Gender, Diversity & Equity Studies requires 30 such credits and is for the benefit of part-time students.

The program is administered by a **Coordinator** within the Department of Sociology. Consult the Coordinator in planning all programs, in undertaking WOM 301ab, Directed Independent Study, or in gaining permission to count cognate courses. For course descriptions of non-WOM electives see the Calendar section department implied in the code and title. **Coordinator: Dr. Mary Ellen Donnan, McGreer 307 ext. 2410.**

Certificate in Gender, Diversity and Equity Studies

30 credits

Description and objectives:

The certificate in Gender, Diversity and Equity Studies (formerly Women's Studies) program at Bishop's has been developed to offer students the opportunity to explore gender in society, past and present, applying new concepts that have emerged in feminist scholarship in the past decade. A major and a minor are offered (see Multidisciplinary Studies).

Also interdisciplinary in design, the Certificate in Gender, Diversity and Equity Studies provides courses ranging over a wide variety of subject areas and is open only to part-time students. Part-time students may take these courses in the Fall, Winter and Summer evening sessions or in the day with permission of the department concerned.

Admissions requirements: (*See Regulations for Certificate Programs*)

Required course: (3 credits)

- WOM 101ab Introduction to Women's Studies

The remaining 27 credits (9 courses) may be chosen from the following optional courses:

- WOM 120ab Women and the Law
- WOM 201ab Women and Feminism in Canada
- WOM 301 Directed Independent Study
- WOM 305 Women and Feminism: Selected Topics
- WOM/DRA 230 Women in Performance
- CLA 250 Sex and Gender in the Ancient World
- CLA 350ab The Goddess: History, Cult and Myth
- DRA 202ab Contemporary American Drama
- DRA 203ab Contemporary European Drama
- DRA 273ab Women Dramatists
- DRA 212 Theatre of the State
- ENG 115ab Women Writers before 1900
- ENG 239ab Feminist Literary Criticism: Theory and Practice
- ENG 247ab Modern American Poetry II

ENG 275ab	Canadian Novel II
ENG 334ab	Restoration and Eighteenth-Century Drama: Sex, Politics and Intrigue
FIH 250ab	Women in Art
FRA 263ab	De la féminité au féminisme
FRA 284ab	L'inscription du féminin: littérature québécoise
HIST 331ab	Women in 19th and 20th Century Canada
HIST 380ab	Women in British History
POL 322b	Theories of Totalitarianism and Racism
PSY 109ab	Psychology of Women
PSY 123b	Multicultural Psychology
PSY 170ab	Psychology of the Couple
PSY 231b	Crisis Intervention
PBI 261ab	The Psychology of Sexuality
PSY 345ab	Family Dynamics and Therapy
REL 146ab	Women in Religion
REL 207	Religion and Sex
SOC 129ab	Sex and Gender
SOC 205ab	Family I
SOC 223ab	Women and Global Inequality
SOC 229ab	Communication: Gender and Culture
SOC 235	Women and the Penal System
SOC 241ab	Cinema
SOC 305ab	Family II: Selected Topics
SOC 340ab	Women: Theory and Ideology
SOC 390	Social Justice & Contemporary Theory

*Other courses may be taken for group 2 credit, with the approval of the coordinator of the Women's Studies section of Sociology.

SOCIOLOGY PROGRAMS' COURSES

Sociology 100ab Sociological Imagination 3-3-0

The primary objective of this course is to stimulate curiosity about that part of people's behaviour that is determined by relationships with others and by membership in groups. This course examines and evaluates the contribution sociology makes to the ongoing process of attempting to understand the surrounding social world. This course is intended for students lacking introductory sociology.

Professor Lustigman

Sociology 100ab La pensée sociologique 3-3-0

Ce cours a pour principal but d'éveiller chez l'étudiant le goût du questionnement et de l'interrogation au sujet des comportements humains déterminés par les relations avec d'autres et par les contextes de groupes. L'apport, passé et présent, de la sociologie à la compréhension de l'environnement social, ainsi que les contributions pragmatiques du domaine seront évalués critiqueusement. Le cours s'adresse aux étudiants n'ayant pas encore touché aux matières d'introduction à la sociologie.

Staff

Sociology 101a Canadian Society 3-3-0

This course provides an opportunity to examine a variety of aspects of Canadian social structure including stratification and inequality regarding class, gender and ethnicity.

This course is required of all Sociology Minors, Majors, and Honours students.

Staff

Sociology 102b Québec Society I 3-3-0

The course presents an analysis of Québec in historical perspective, and examines nationalism, bilingualism and social structures.

This course is required of all Sociology Minors, Majors, and Honours students.

Professor Gosselin

Sociology 105a Media and Society I 3-3-0

An introduction to the impact of media upon society and the social structuring of contemporary media as industries which produce values and ideology.

Professor Czernis

Sociology 107 Canadian First Nations 3-3-0

An introduction to the study of First Nations in Canada.

Professor Donnan

Sociology 110a Research Methodology 3-3-0

Sociological research will be dealt with in its quantitative and qualitative orientations. Students will be introduced to techniques of conceptualization, hypothesis formulation, and operationalization.

This course is required of all Sociology Majors and Honours students.

Professor Czernis

Sociology 111b Data Collection/Analysis 3-3-0

Emphasis will be placed on the construction of different methodological frameworks (survey, experiment, fieldwork, unobtrusive measures) as well as the preparation of adequate methods and techniques for data gathering and analysis (sampling, design, coding, questionnaires, interviews).

This course is required of all Sociology Majors and Honours students.

Prerequisite: Sociology 110a

Professor Czernis

Sociology 129ab Sex and Gender 3-3-0

The relation between sex and gender is examined in terms of roles and values, social inequality and transformations in these over time; the interface between class, gender, and ethnicity is examined with regard to specific social problems and theories.

Staff

Sociology 155 Sociology of Sport 3-3-0

A theoretical and empirical introduction to the social organization of sports and how they are mediated.

Professor Coulter

Sociology 190 Introduction to Postcolonial Study 3-3-0

An introduction to postcolonial theory and sociological issues arising from the cultural and economic conditions left behind by colonizers and the colonized. By looking at events in countries such as India, Nigeria, the Congo and other former colonies we come to understand the challenge of developing theoretical perspectives which grasp the complex influences of colonizer and colonized upon each other.

Professor Donnan

Sociology 202a Directed Independent Study I 3-3-0

A tutorial course in which the student (normally a major) may pursue his or her interests in a selected area of sociology, under the direction of a member of the Department.

Prerequisite: Permission of the instructor and the Department

Sociology 203b Directed Independent Study II 3-3-0

See Sociology 202a.

Permission of the instructor and the Department

Sociology 205a Family I 3-3-0

Changing forms and functions of the family in Western society; growth and decline of the symmetrical family, definitions, theories, marital and sexual roles, and child rearing.

Staff

Sociology 207b North American First Nations 3-3-0

The course examines the sociology of strategies of assimilation and the forms of resistance to these strategies in North America.

Prerequisite: Sociology 107 or permission of the instructor.

Staff

Sociology 208ab Criminology 3-3-0

A survey of theories of crime and criminality in relation to class, race and gender. Substantive issues will include: murder, prostitution, legal and illegal drug use, woman abuse, white collar crime, and organized crime.

Staff

Sociology 209 Young Offenders 3-3-0

The subject of young offenders in Canada is addressed using both contemporary critical theory and empirical evidence. The topics covered include the treatment of youth in Canada by the justice system, enforcement agencies, and their social realities. Variables of class, social inequality, gender and ethnicity contribute to the examination of the relationships of youth to criminal trends and behaviors patterns.

Sociology 214ab Aging 3-3-0

Aging and the life course perspective. Sociological theories on aging in relation to gender, class, and ethnicity.

Staff

Sociology 215ab Culture, Ethnicity and Aging 3-3-0

This course is designed to raise an awareness of aging in relation to culture and ethnicity. Concepts and theories of culture, aging and group interaction understood within a Canadian perspective will be provided in addition to sociological examination of class, gender and race.

Staff

Sociology 217ab Social Policy of Aging 3-3-0

This course will study the content, the interpretation and impact of laws affecting elderly and will examine the evolution of social policies and programs in the province of Quebec and in Canada. It will analyse the principles that the state follows to determine its implication in the field of social and health services to the aging population. The evolution of social policies and programs, the current configuration of governmental resources, community resources, and natural networks will also be examined.

Sociology 219 Sociology of the Body 3-3-0

Notions of the body as the cultural representation of our contemporary "embodied" selves will be explored. This course will uncover the strategies of social, political and economic forces as these problematize the body and seek to control, manipulate, and alter behaviour.

Professor Gosselin

Sociology 220ab Work and Leisure 3-3-0

Industrial and "post-industrial" societies, especially Canada, are examined within a world-system framework. The focus is on power dynamics, contemporary and theoretical issues, involving workers, professionals, owners and consumers.

Formerly called "Industrial Sociology I".

Staff

Sociology 221a Classical Sociology 3-3-0

An introduction to the nature and purpose of sociological theory and reasoning through a critical examination of the work of Durkheim and Weber.

This course is required of all Sociology Majors and Honours students.

Professor Lustigman

Sociology 222b Dialectical Reasoning 3-3-0

In tracing the tradition which collects Plato, Marx and Simmel, this course seeks to examine the place of dialectical theory and reasoning in sociology.

This course is required of all Sociology Majors and Honours students.

Prerequisite: Sociology 221 or permission of the instructor

Professor Lustigman

Sociology 223ab Women and Global Inequality 3-3-0

This course considers the social location of women within a political economy of globalization. Understanding women's diverse lives requires attention to public, private, local, regional, national and global factors.

Staff

Sociology 225ab Québec Society II 3-3-0

Selected topics for analysis of the values, ideologies, behaviour patterns and material culture of Québec society. The course critically examines Québec society during modernity and early post-modernity and draws heavily on artistic and cultural representations (painting, sculpture, literature, etc.)

It is recommended that students take Soc 102 or Soc 101 prior to this

Professor Coulter

Sociology 229b Communications: Gender and Culture 3-3-0

This course examines how society defines gender through communication and what that means for our institutional and personal lives, safety, relationships, and professional opportunities. The focus is on how men and women participate in the social construction of gender, its impacts, and efforts to achieve equality. Topics include: gendered identities, gendered verbal and non-verbal communication about race, gender and violence in the workplace and other institutional or personal settings.

Staff

Sociology 230ab Deviance I 3-3-0

Definitions of deviant behaviour, social roles of deviants and the structure of control.

Professor Lustigman

Sociology 235ab Women and the Penal System 3-3-0

A critical understanding of gender in criminology. Substantive issues will include: Sexual assault and the justice system, women and family law in the courts, domestic violence, gender and murder. Contemporary theories in criminology and their application are examined.

Staff

Sociology 241ab Cinema 3-3-0

Culture phenomena and values such as: class interest, gender roles, important events,

national character and foreign policy, the ideal family, the deviant, etc., are reflected and contested in film. Students will be exposed to and discuss a variety of theories and methods of analysing culture by way of film as industry and meaning creation.

Professor Coulter

Sociology 245ab Race and Ethnicity 3-3-0

The sociology of multiethnic and multiracial societies examines social conflicts over the distribution of resources and power; racism and multicultural ideologies are examined.

Professor Gosselin

Sociology 250b Collective Behaviour 3-3-0

Macro-structures of society such as crowds, publics, fads and riots are examined, including evolving collectivities and their subsequent ideological transformations.

Professor Czernis

Sociology 260a Community 3-3-0

A comparative and historical analysis of rural, urban, and ethnic communities.

Professor Lustigman

Sociology 280a Interpersonal Communication 3-3-0

Human interaction at the macrosociological level. Equality, domination, integration, marginalization, co-operation and conflict will be examined.

Professor Czernis

Sociology 281b Communications Methods 3-3-0

Research in the areas of interpersonal, organizational and mass communication. Methods particular to communications studies are examined and applied.

Professor Czernis

Sociology 290ab Contemporary Theory 3-3-0

A survey of twentieth century theory through a variety of schools including symbolic interactionism, functionalism, neo-Marxism, feminism, modernism and postmodernism.

Professor Coulter

Sociology 291b Sociology of Art 3-3-0

An introduction to the Sociological study of the Arts. The course focuses on the social practices and organizational frameworks related to artistic production/creation, mediation processes, and the reception of art works and artists. Attention will be given to issues related to race, gender, class, and power.

Professor Coulter

Sociology 292 Social Policy 3-3-0

Introduction to the sociological study of social policy in the Canadian context. The course will examine civil society in relation to a rapidly changing policy context. The development and outcomes of policy will be investigated from a number of theoretical perspectives.

Prerequisites: None

Staff

Sociology 293 Visual Sociology 3-3-0

We live in cultures which are saturated with digital information and new media. This course engages with major thinkers who study the use of photographs, film, and video to understand society. The course is organized around a series of ideas and problems involving intersections between theory and practice.

Professor Coulter

Sociology 294 Sociology of Tourism 3-3-0

Travel, journeys and their associated human migrations are the key areas of focus in this course. While movement for purposes of rest and recreation has always been part of our collective legacy, in this world of increasing globalization, the mass tourist industry and a variety of leisure activities has helped transform many locations around the globe. The course will explore tourism, in all its forms and the impact of traveling, both positive and negative, on cultures, sustainability and the environment.

Professor Gosselin

Sociology 295 Sustainable Societies 3-3-0

This course addresses concepts of social and cultural sustainability. Key questions concerning the environmental impacts of social organization as well as options for change will be considered.

Professor Donnan

Sociology 296 Globalism and Culture 3-3-0

An introduction to key concepts for the current understanding and applications of cultural and social globalization.

Sociology 299/

EDU303	Sociology of Education	3-3-0	Comparative study of the Canadian education system and processes in light of current sociological theory and research <i>Staff</i>	sumption, and knowledge production. <i>Prerequisite: Students should have 9 credits in Sociology or permission of the instructor</i> <i>Staff</i>
Sociology 301b	Aspects of Sociological Inquiry	3-3-0	The relationships between language and inquiry will be examined with reference to the works of contemporary sociological theorists. <i>Prerequisites: Students should have 9 credits in Sociology or permission of the instructor</i> <i>Professor Lustigman</i>	Sociology 322ab Urban Sociology 3-3-0 Theories of urban growth and development; comparative analysis of cities and their problems. <i>Prerequisite: Students should have 9 credits in Sociology or permission of the instructor</i> <i>Professor Gosselin</i>
Sociology 302a	Directed Independent Study III	3-3-0	See Sociology 202a. <i>Prerequisite: Permission of the instructor and the Department</i>	Sociology 331b Deviance II: Selected Topics 3-3-0 Selected topics such as drugs, homosexuality, prostitution and juvenile delinquency will be discussed. <i>Prerequisite: Students should have 9 credits in Sociology or permission of the instructor</i> <i>Professor Lustigman</i>
Sociology 303b	Directed Independent Study IV	3-3-0	See Sociology 202a. <i>Prerequisite: Permission of the instructor and the Department.</i>	Sociology 340b Women: Theory and Ideology 3-3-0 Women are viewed as both object and subject of ideological and theoretical discourses. Oppression and liberation are investigated from a variety of theoretical perspectives. <i>Prerequisite: Students should have 9 credits in Sociology or permission of the instructor</i> <i>Professor Gosselin</i>
Sociology 305b	Family II: Selected Topics	3-3-0	An advanced seminar on selected issues affecting the family in historical and contemporary settings involving the relationship between public and private spheres and between production and reproduction. <i>Prerequisite: Students should have 9 credits in Sociology or permission of the instructor</i> <i>Staff</i>	Sociology 361b Ethnographics 3-3-0 The emphasis is upon understanding and utilizing ethnographic methods in the examination of societal events and relationships, in terms of how these are perceived and socially organized. <i>Prerequisite: Students should have 9 credits in Sociology or permission of the instructor</i> <i>Professor Lustigman</i>
Sociology 307	Sociology of Health	3-3-0	This course seeks to examine the place of health and illness in society, the relationship between bio-medical problems and the social, political and economic realities that help shape them. Topics will include poverty and health, mental illness, aging, death and dying, professionalism, health service organization, inequalities in health service access and use, recent policies and difficulties with health care reform.	Sociology 381ab Media and the Environment 3-3-0 This course examines processes of technologically mediated interaction at the macro-sociological level. Trends and structures of mass culture and communications are examined in relation to how we relate to nature. <i>Prerequisite: Students should have 9 credits in Sociology or permission of the instructor</i> <i>Professor Czernis</i>
Sociology 308b	Formal Organization	3-3-0	The institutionalization and legitimation of power and decision-making processes. Special emphasis is given to innovation and deviance in formal organizations. <i>Prerequisite: Students should have 9 credits in Sociology or permission of the instructor.</i> <i>Professor Czernis</i>	Sociology 390ab Social Justice and Contemporary Theory 3-3-0 The course focuses on the effort to develop a credible progressive vision of an alternative to the present social order given the collapse of socialism as the principal ideal that inspired many struggles for social transformation over the last century. Included is an assessment of the emergence of neo-liberalism and the decentering of class in contemporary theory. The course also investigates efforts to develop a theory of social justice that includes both recognition and redistribution claims. <i>Prerequisites: Students should have 9 credits in Sociology or permission of the instructor.</i> <i>Professor Coulter</i>
Sociology 309	Advanced Seminar in Global Colonization and Decolonization	3-3-0	Colonialism and imperialism are considered in relation to settler societies and global power structure. This course questions theories of decolonization and liberation in the context of cultural and economic empires. <i>Prerequisite: Six credits in Sociology including one of the following: Sociology 190, Sociology 207, Sociology 245, Sociology 296</i> <i>Professor Donnan</i>	Sociology 395 Advanced Theories of Social Sustainability 3-3-0 Advanced seminar on the dynamics of global and local relationships regarding the nature of sustainable societies. <i>Prerequisite: Six courses in sociology including Sociology 295 or permission of instructor.</i> <i>Professor Donnan</i>
Sociology 311b	Quantitative Tools for Social Research	3-3-0	A critical review of statistical methods frequently used in social research. <i>Prerequisites: Sociology 110 and 111, or permission of instructor. Required for Honours Sociology students.</i> <i>Professor Coulter</i>	Sociology 396 Post Colonial Theory 3-3-0 Advanced seminar in contemporary postcolonial theories. <i>Prerequisite: Six courses in Sociology including Sociology 296 or permission of instructor.</i> <i>Professor Donnan</i>
Sociology 315ab	Political Sociology in the Digital Era	3-3-0	This course examines the state and policy making in Canadian and global contexts, from a sociological perspective. Marxist, feminist and traditional theories are examined. <i>Prerequisites: Students should have 9 credits in Sociology or permission of the instructor</i> <i>Professor Coulter</i>	Sociology 402a Honours I: Special Topics 3-3-0 The course accommodates the study of particular sociological topics at an advanced undergraduate level. Subjects will vary from year to year. <i>Required for Honours Sociology students; normally to be taken in the final year.</i> <i>Prerequisite: The completion of all required courses within the Major</i> <i>Staff</i>
Sociology 320ab	Knowledge	3-3-0	How do we know what we know? An analysis of the role of ideas in the development of social institutions and the impact of belief systems on social values. Science, politics, education, religion, the arts and the professions are examined. <i>Prerequisite: Students should have 9 credits in Sociology or permission of the instructor</i> <i>Professor Czernis</i>	Sociology 404b Honours II: Research Strategies 3-3-0 This course examines research procedures, the objectives and limits of particular approaches, and the relationships between theory, research strategy and its application. <i>Required for Honours Sociology students</i>
Sociology 321b	Sociology of Technology	3-3-0	The social and cultural context of technology as it has become embedded at the local and global arena. Topic may include: social theories of knowledge and information, the political economy of information, the development of technology as a tool of con-	

Prerequisite: Sociology 402 and completion of all required courses in the Major Staff

Sociology 450 Thesis 6-0-0
Supervised honours research project under the direction of an instructor.
This is an option for Honours Sociology students only and must be submitted to the Department upon completion.

Prerequisite: The completion of all required courses within the Major and the permission of the Departmental member who acts as the thesis advisor. Normally taken along with 402 and 404 in the final year of the Honours Sociology program. Staff

Women's Studies 101ab Introduction to Women's Studies 3-3-0
This course introduces students to selected interdisciplinary background and methods of research in women's and gender studies.

A prerequisite and required in all Women's Studies Programs/degrees. Staff

Women's Studies 120ab Women and the Law 3-3-0
This course provides a comprehensive study of the political and legal development of the status of women in Canada, by way of: feminist theory, the division of labour, political culture and human rights. The objectives include an appreciation and understanding of feminist political theory and general principles of legal jurisprudence.

Staff

Women's Studies 201ab Women and Feminism in Canada 3-3-0
This course explores women's gendered experiences in Canadian society, specifically the impacts of diverse social problems and globalization on women. The analytical concept of gender in conjunction with class, identity, race and ethnicity will be used. The importance of feminist thought on Canadian policy, internationalism, human security and human rights may also be addressed.

Women's Studies 301ab Directed Independent Study 3-3-0
A student undertakes independent study with a faculty member in the programs.

Prerequisite: Permission from the coordinator and the instructor. Staff

Women's Studies 305b Women and Feminism: Selected Topics 3-3-0
This course explores advanced theoretical and methodological issues in feminism.
Prerequisite: Women's Studies 201ab or permission of the instructor Staff

For WOM/DRA 230 see Drama department course descriptions.

Multidisciplinary Programs and University Wide Courses

I. Bachelor of Commerce and Science – B.C.S.

II. Engineering and Liberal Arts Program

III. Environmental Science Major

IV. Experiential Learning

V. Information Technology Major

VI. International Studies (INT)

VII. Pre-Medicine Major

VIII. Social Studies Major

IX. Sports Studies Major

I. BACHELOR OF COMMERCE AND SCIENCE - B.C.S.

Bishop's University offers an interdisciplinary degree program leading to a Bachelor of Commerce and Science, B.C.S. The program provides students with a broad-based, modern education. Students simultaneously pursue studies in two streams: one scientific discipline, and the other in commerce. They develop skills in scientific analysis, effective presentation, and quantitative reasoning while receiving training in the languages of international commerce and advanced science. The result is a rigorous education in two different yet complimentary fields of human activity. Providing exactly such broad, liberal, education of outstanding quality is the mission of Bishop's University.

The B.C.S. degree program, with its small classes, individual instruction, intimate learning environment and mentoring professors, produces graduates who confidently take up careers in environmental consulting, in the biotechnology and biopharmaceuticals industries, as entrepreneurs, technology managers and marketers, personal training and fitness providers, financial advisors, science journalists and writers. B.C.S. grads may also pursue graduate studies in schools of business, applied science, environmental law, journalism, or health fields.

The Program

Students are considered for admission into the B.C.S. degree program after completion of a Québec Collegial Diploma (DEC—Diplôme Etudes Collegial), grade 12 in other provinces or the U.S.A., or the equivalent level of education from other international origins. Admitted students (except those possessing a DEC from a Québec CEGEP) will normally be registered in 123-credit programs. The program is normally of four years duration, or 120 course credits, plus the 3-credit, English Writing Proficiency examination (EWP) which all Bishop's students must complete. See the section for **Four-Year Students** below. Applicants with a DEC may be admitted to a B.C.S. degree program of three years duration (93 credits including the EWP). See the section for **CEGEP Applicants** below. Three-year students are exempt from the "foundations studies" courses with which four-year students begin their B.C.S. degree at Bishop's.

All students admitted to the B.C.S. program choose one concentration stream of studies from among the sciences or mathematics, and simultaneously pursue broad-based studies in commerce from the Williams School of Business. All B.C.S. students

must also complete a set of cognate courses, designed to provide skills important across both fields of his/her concentration studies, and give opportunity for reflection and discussion of relevant societal issues. In addition, all 3-year students have one free elective course choice, while all 4-year students have three or four free-elective choices, depending on the science or math concentration stream chosen.

Three-year students immediately begin the required courses listed in sections A. – C. below. Four-year students must first complete the required “foundations studies” courses which are all prerequisite to the courses composing the various concentration streams in section A. below. Therefore, four-year students normally begin the courses listed in sections A. – C. in their second year of studies at Bishop’s. See the section for **Four-Year Students** below for further details.

A. Concentration Streams in Science and Mathematics

All B.C.S. students (3-year and 4-year) must choose one “concentration stream” from List A. The lists of required courses and options for each of these streams are found in the section, **Course Lists for Science and Math Concentration Streams**, further below.

LIST A

(Total: at least 36 credits or 12 lecture courses, plus labs)

Applied Mathematics	Exercise Science and Sports Studies
Biochemistry	Physics
Chemistry	Physiology
Computer Science	Psychology
Environmental Biology	Pure Mathematics

B. Commerce Core and Business Electives

All B.C.S. students (3-year and 4-year) must complete the following “Commerce Core” plus **any six** Business courses (18 credits of “Business required electives”).

COMMERCE CORE

(Total: 19 credits — 6 courses plus 1 lab)

BAC 121	Purposes of Accounting
BMG 112	Introduction to Management Theory and Practice plus ILT 100 Information Literacy and Critical Thinking Laboratory
BMK 112	Consumer Behaviour and Introduction to Marketing
BFN 201	Finance I
BHR 221	Organizational Behaviour
BMK 211	Marketing Management

BUSINESS REQUIRED ELECTIVES

(Total: 18 credits — 6 courses)

A student may choose to fill the “Business required electives” with 6 courses chosen from **one** of the “Concentration Streams” available from the Williams School of Business, namely:

Accounting	Human Resource Management
Entrepreneurship	International Business
Finance	Marketing

In this case, the student’s transcript will include a notation for the Business concentration stream selected. Alternately, the student may choose any six courses from the Williams School of Business (other than the commerce core).

C. Cognate Component

All B.C.S. students (3-year and 4-year) must complete **15-credits — 5 courses** of “Cognate courses” as listed in parts a) – c).below. In addition, all 4-year students (only) must also complete the writing course listed in part d):

a) **6-credits of Economics: ECO 102 and ECO 103**

b) **6-credits of Statistics: PHY 101 and BMA 141**

- Students whose science concentration is “Psychology” may take PMA 160 and PMA 161 instead of PHY 101 and BMA 141
- Students whose science concentration is “Exercise Science and Sports Studies” may replace Phy 101 with BMA 140.

c) **3-credits of “Reflective Studies”**. Students choose one of the following:

- PHI 245 The Philosophy of Science,
- SCI 201 History of Science,
- PHI 240 Topics in Business Ethics
- BPH 240 Business and Professional Ethics,
- BIO 252 Bioethics,
- CSC 201 Computer Ethics,
- PSY 330 Psychology and Ethics

d) **3-credits of “Writing Skills” training**. All 3-year students are **exempt** from this cognate requirement. All 4-year students must complete:

ELA 116 Effective Writing

Note: this course may be taken in the first year of a 4-year program.

D. Free Electives

All 3-year B.C.S. students must complete one, 3-credit free elective course of their choosing. All 4-year students must complete 9-12 credits (3 or 4 courses) of free electives, depending on their choice of science or mathematics concentration stream. See the section for 4-year students below.

Recommended free electives include those in the list for the “reflective studies” cognate requirement (not including the one chosen to fulfill the requirement), and:

BMG 214 Introduction to Entrepreneurship:
New Venture Creation.

E. English Writing Proficiency (EWP)

Before graduating, all Bishop’s students must complete the 3-credit EWP exam. Normally this is completed during the first year of studies.

Applicants from a Québec CEGEP

Students with a DEC in Pure and Applied Sciences or in Health Sciences from a Québec CEGEP will be admitted to a 3-year program of 93 credits including the English Writing Proficiency test (EWP). However, students with *any* Québec diploma of collegial studies (DEC) will be considered for admission to the B.C.S. degree program. Other CEGEP graduates will be admitted to programs of varying lengths depending on the concentration stream chosen, and which (if

any) collegial science, psychology and mathematics courses the student has been credited with in their DEC program. Any CEGEP graduate who is missing some (or all) of the “foundations” courses appropriate to their choice of science or math concentration stream from List A, above, will have these courses added to the total credit requirements for their degree, necessarily making their programs longer than 3-years. The appropriate “foundations” courses are found in Table I, in the section for Four-Year Students, below. Usually, a DEC in Sciences will have covered these “foundations” courses. That is, if a student's DEC included some or all of the collegial courses: *General Biology, General Chemistry, Solutions Chemistry, Differential Calculus, Integral Calculus, Linear Algebra, Introduction to Psychology, Mechanics, Electricity and Magnetism*, the equivalent “foundations” courses will not be required.

The first year of a 3-year program is called the U1 year. Students admitted to the 3-year program will normally register in the U1 year in ten, one-semester courses plus all co-requisite laboratories as follows:

6 credits of economics: ECO 102 and ECO 103

6 credits of statistics: PHY 101 and BMA 141

9 credits in their chosen science or math concentration plus any co-requisite laboratories (as per the lists below)

9 credits of commerce core: BAC 121, BMG 112 (+ ILT 100), BMK 112

The 3-year (93-credit) program is composed of 36 lecture credits in the student's chosen science or mathematics concentration (plus any co-requisite laboratories), the 18-credit “Commerce Core”, 18 additional credits of Business required electives, 6 credits of Economics, 6 credits of Statistics, 3 credits of reflective studies (chosen from a list of approved courses), and 3 free credits (one free elective course), plus the 3-credit EWP.

TABLE I

Biochemistry, Environmental Bio, or Physiology	Chemistry or Physics	Exercise Science & Sports Studies	Pure or Applied Mathematics or Computer Science	Psychology
MAT 198, MAT 199	MAT 191, 192	MAT 198, MAT 199	MAT 191, 192	MAT 193, 195
BIO 191, BCH 191		BIO 191, BCH 191	MAT 108	BIO191, BCH 191
CHE 191, CHE 192	CHE 191, 192		CSC 101	
PHY 193	PHY 191, 192	PHY 193, PHY 194	PHY 191, PHY 192	
		PSY 101 or PSY 102	PSY 101, PSY 102	
ELA 116	ELA 116	ELA 116	ELA 116	ELA 116
2 free electives	3 free electives	2 free electives	3 free electives	3 free electives

NOTES

1. A course in Precalculus Mathematics, MAT 190, is available, if necessary.
2. All 4-year students normally complete 3–6 credits (1–2 courses) of free electives during the U0 year and a further 3 credits (1 course) during the upper years.
3. All of the courses in Table I have 1 credit, co-requisite laboratories except BCH 191, ELA 116, MAT 191, 192, 198, 199, PSY 101 and 102. The laboratory for CSC 101 is integrated into the 4-credit course.

Four-Year Students

First Year: Foundations Studies

All Students admitted to a 4-year B.C.S. program will normally register in first year in ten, one-semester courses, plus all co-requisite laboratories. This first year of studies is called the U0 year. Students will register in six or seven “foundations” science and mathematics courses (2 mathematics, and 4 or 5 science courses all as per Table I below), plus ELA 116 Effective Writing, and two or three elective courses. The number and nature of the required foundations science and math courses depends on which science or mathematics concentration stream is chosen. Students may choose to replace one or more of the free electives in U0 with a required cognate course in economics and/or a required course from the “Commerce Core”. While not necessary, these choices will result in increased scheduling flexibility in the student's upper years, at which time the free elective courses would be chosen. The 2nd year in a 4-year program is called the U1 year.

All 4-year B.C.S. students must include the following in their U0-year:

6-9 credits of Mathematics as per table I below.

9-15 credits of Sciences plus any co-requisite laboratories, as per table I below.

3-credits: ELA 116 Effective Writing, as per table I below

Either 6-9 credits of free electives as per table I below **or**

One of BAC 121, BMG 112 (plus ILT 100) or BMK 112, plus one of ECO 102 or ECO 103, **plus** (possibly) one free elective course

4. Recommended free electives include:

- a. any of the courses in the approved list for the “reflective studies” cognate (not counting the one taken to fulfill the cognate requirement C.c) above).
- b. the entrepreneurship course (if it is not already being counted as one of the Business required electives for requirement B. above):

BMG 214 Introduction to Entrepreneurship:
New Venture Creation.

Course Lists for Science and Math Concentration Streams

NOTES

1. The course lists below describe 36-credit (12 course) concentration streams in science or mathematics, beginning with the U1-year. In all cases it is assumed that all appropriate U0 "Foundations" science and math courses (or their collegial equivalents for cegep graduates) as outlined in Table I above have already been completed.
2. Some science courses have 1-credit, co-requisite laboratories. These credits do not count toward the degree's total credit requirements, but are necessary for the degree.
3. Course numbers with an "a" are offered only in the fall semester. Course numbers with a "b" are offered only in the winter semester; others are scheduled as needed.

Applied Mathematics

MAT 105a	Introduction to Discrete Mathematics
MAT 106a	Advanced Calculus I
MAT 107b	Advanced Calculus II
CSC 111	Programming Methodology
MAT 210a	Ordinary Differential Equations
MAT 211b	Mathematical Methods of Physics
MAT 213a	Introduction to Probability
MAT 214b	Introduction to Mathematical Statistics
MAT217b	Complex Analysis
MAT 224	Cryptography
MAT 225	Numerical Methods
MAT 301	Vector Analysis

Biochemistry

BIO 110a	Introductory Cellular and Molecular Biology
BIO 118b	Genetics + Lab
CHE 102	Inorganic Chemistry I
CHE 104	Analytical Chemistry – An Environmental Approach + Lab
CHE 105a	Organic Chemistry I – Introductory + Lab
CHE 106b	Organic Chemistry II – Introductory + Lab
BCH 211a	Biochemistry I – Proteins + Lab
BCH 212b	Biochemistry II – Lipids and Biomembranes + Lab
BIO 226a	Animal Physiology I + Lab
BCH 275b	Biochemistry III – Metabolism + Lab
BIO 352	Microbiology + Lab
BCH 370	Molecular Genetics

Chemistry

CHE 102	Inorganic Chemistry I and CHE 189 (a stand alone lab)
CHE 103	Physical Chemistry I + Lab
CHE 104	Analytical Chemistry – An Environmental Approach + Lab
CHE 105	Organic Chemistry I – Introductory + Lab
CHE 106	Organic Chemistry II – Introductory + Lab
CHE 144	Environmental Chemistry I – Energy and the Atmosphere
CHE 221	Elements and Minerals + Lab
CHE 222	Inorganic Chemistry III + Lab
CHE 223	Physical Chemistry II + Lab

CHE 224	Physical Chemistry III + Lab
CHE 225	Intermediate Organic Chemistry I + Lab
CHE 227	Principles and Practices of Chemical Spectroscopy and Mass Spectrometry + Lab

Computer Science

MAT 105a	Introduction to Discrete Mathematics
CSC 111	Programming Methodology
CSC 121	Advanced Programming Techniques
CSC 204	Data Structures
CSC 207	Using and Designing Databases
CSC 215	Data Communications
CSC 217	Design and Analysis of Algorithms
CSC 218	Advanced C++ Programming
CSC 303	Principles of Programming Languages
CSC 309	Principles of Operating Systems
CSC 310	Software Engineering
+ 1 Computer Science elective course	

Environmental Biology

BIO 115 a	Diversity of Life I + Lab
BIO 116b	Diversity of Life II + Lab
BIO 117a	Ecology + Lab
BIO 118b	Genetics + Lab
CHE 144	Environmental Chemistry I – Energy & the Atmosphere + Lab
BIO 212b	Evolution

+ 6 courses from the list below..

*BIO 113	Field Biology I
*BIO 114	Field Biology II
ESG 127	Intro to Physical Geography
BIO 217	Advanced Ecology
BIO 221	Biogeography
BIO 230	Freshwater Biology
BIO 257	Vascular Plants Systematics
BIO 270	Vertebrate Zoology
BIO 330	Ornithology
BIO 349	Biology of the Insects
BIO 358	Animal Behaviour

* these courses are only offered during the Spring/summer semesters.

Exercise Science & Sports Studies

EXS 101	Introduction to Exercise Science
EXS 127b	Introductory Exercise Physiology
EXS317a	Biomechanics + Lab
EXS 373	Advanced Exercise Science + Lab (cross-listed as BIO 333)
PSY 102	Introductory Psychology II: Human Interactions
BIO 133	Human Anatomy + Lab
One of:	PSY 203a Sport and Psychology: Performance Enhancement or PSY 204b The Social Psychology of Sport and Exercise
PBI 227a	Psychology of Nutrition
PBI 275	Health Psychology I
PBI 276	Health Psychology II
PBI 288b	Brain and Behavior I

One of: SOC 155 Sociology of Sports,
SPO 201 Culture and Society,
SPO 301 Athletes and Society, **or**
SPO 401 Experiential Learning*

* ELP 300 *Experiential Learning Placement*, may replace this course, upon approval.

Physics

MAT 106a Advanced Calculus I
MAT 107b Advanced Calculus II
MAT 108a Matrix Algebra
PHY 106 Waves and Optics
PHY 107 Thermal and Fluid Physics
PHY 117 Introduction to Mechanics
PHY 213a Modern Physics I
PHY 214b Modern Physics II

+ 4 Physics courses from the 200 level

Physiology

CHE 105a Organic Chemistry I – Introductory + Lab
BIO 110a Introductory Cellular and Molecular Biology
BIO 115a Diversity of Life I + Lab
BIO 116b Diversity of Life II + Lab
BIO 118b Genetics + Lab
BIO 133 Human Anatomy + Lab
BIO 215 Metabolism + Lab
BIO 226a Animal Physiology I + Lab
BIO 228b Animal Physiology II + Lab

+ 3 courses from the list below:

BIO 278 Physiology and Pharmacology of Aging
BIO 310 Advanced Cell Biology
BIO 314 Biotechnology + Lab
BIO 320 Programd Cell Death
BIO 328 Advanced Physiology
BIO 352 Microbiology + Lab
BIO 359 Human Genetics
BIO 360 Molecular Genetics
BIO 365 Developmental Biology

Psychology

PSY 206 Personality I
PSY 207 Personality II
PSY 213 Research Methods
PBI 288 Brain and Behaviour I
PSY 342 History of Psychology

One of: PSY 245 **or**
PSY 246 (Social Psychology I or II)

One of: PSY 219 Psychology of Women,
PSY 293 Multicultural Psychology, **or**
PBI 241 Evolutionary Psychology

One of: PCS 305 Cognition,
PSY 329 Applied Memory and Cognition, **or**
PSY 370 Learning and Memory

One of: PSY 236 Child Development I
PSY 237 Child Development II),
PSY 266 Adult Development and Aging, **or**
PSY 290 Adolescence

+ 3 courses from any area of Psychology.

Note: some courses have pre-requisite requirements which must be met.

Pure Mathematics

MAT 104 History of Mathematics
MAT 105a Introduction to Discrete Mathematics
MAT 109b Linear Algebra
MAT 115b Further Discrete Mathematics
MAT 125 Number Theory
MAT 215a Real Analysis I
MAT 216b Real Analysis II
MAT 217 Complex Analysis
MAT 221 Introduction to Modern Algebra I
MAT 222 Introduction to Modern Algebra II
MAT 331 Metric Spaces and Topology

+ 1 Mathematics course from the 200 or 300 level

GENERAL NOTES:

1. Students in the B.C.S. program are encouraged to seek regular academic advising from the faculty member elected for this responsibility, and from the Department Chairperson in charge of the science or mathematics concentration stream chosen.
2. Students may flexibly change their programs according to the normal Divisional and Departmental regulations appropriate. They may apply to pursue a major or honours specialization in Science or Mathematics leading to the B.Sc. or B.A. degree, or apply to pursue a B.B.A. (Bachelor of Business Administration) or B.A. Major Business degree in the Williams School of Business.
3. **Double Failure Rule:** Any student who twice receives a failing grade in any course required in either the Commerce Core, the required Business electives, or the science or mathematics concentration stream chosen for their B.C.S degree, will not be permitted to repeat that course again, and are also precluded from receiving transfer credit for the equivalent course elsewhere. Such students will not be eligible to graduate with a B.C.S. degree, but may be eligible to switch programs as in note 2).
4. **Maintenance of Good Standing:** Notwithstanding the University regulations on Academic Standing, the B.C.S. degree program has additional requirements. Students with cumulative averages of 60% or more, calculated at the end of each academic semester, remain in good standing in the B.C.S. degree program. For the purposes of this regulation, the cumulative average will be computed for the first time after the student has registered in two full-time academic semesters at Bishop's or has attempted thirty credits. In the case that a course is repeated, the grade awarded on the second attempt will be the only one used in the computation of the average. Students will not be permitted to remain registered in the B.C.S. degree program if their cumulative average is less than 50%. Students with cumulative averages between 50 and 59% will be permitted

to remain in the program for one additional semester during which they must improve their cumulative average to greater than 60% or they will not be permitted to remain in the B.C.S. program. Having been required to leave the B.C.S. program, a student is not eligible to transfer back in.

5. The University reserves the right to add or delete or modify these program regulations at its convenience. For graduation purposes, a student may meet the requirements of the program as in force during the academic year in which he/she entered the program, or as in force during the academic year of graduation, whichever is more advantageous to the student.

Program Contact:

Williams School of Business:

Prof. William J. Robson

Office: H-202

Phone: (819) 822-9600 ext. 2514

brobson@ubishops.ca

Division of Natural Sciences and Mathematics:

T.B.A.

SCI 201ab History of Science 3-3-0

This course provides an introduction to the history of science. It briefly outlines the development of thinking about the natural world from the ancient myths and philosophies of the Middle East and Greece to the time of Galileo. It then follows the shift from the medieval to the modern view of man's place in the universe that took place between Copernicus and Newton and its intellectual, religious and social implications. It discusses the historical development of the modern scientific endeavor including the models of Descartes, Boyle, and Newton, Darwin and the theory of evolution, electromagnetism and Maxwell's equations. The course concludes with an emphasis on some of the most modern developments: mathematical models, the age of technology, materials, computation, genetics and DNA, biotechnology, proteomics, nanotechnology and quantum physics.

EXS 101a Introduction to Exercise Science 3-3-0

This course provides an introduction to the field of exercise science as a discipline and profession. Using epidemiological studies, students are exposed to the role of physical activity on morbidity and mortality. Primary and secondary health-risk factors are examined relative to the influence physical activity has on them and one's quality of life. Causes of sports injury are also addressed.

Co-requisite: Exercise Science 181a.

EXS 181a Introductory Exercise Science Laboratory 1-0-3

The laboratory course focuses on practical knowledge of human body movement. Biomechanical concepts and principles are applied to understand movement in running, jumping, throwing, kicking, and swimming.

Co-requisite: Exercise Science 101a.

EXS 127b Introductory Exercise Physiology 3-3-0

This course explores concepts in Exercise Physiology, with applications in Sports Medicine. The student will be challenged to apply basic knowledge of human anatomy and physiology to exercise, training and sports. Adaptation of body systems to exercise, injury and reconditioning will be studied. Basic principles of biomechanics and exercise will be explored. The course will consist of lectures, presentations, discussion periods, and demonstrations.

Prerequisites: Secondary school Biology and/or Chemistry are recommended.

BIO 133a Human Anatomy 3-3-0

The anatomy of all of the major body systems will be discussed in the context of human health and disease. This course is designed for students interested in the biomedical sciences or health education. Students will develop their understanding of human anatomy and will acquire the ability to communicate scientific concepts to their patients or students.

Prerequisite or Co-requisite: Biology 191 or collegial Biology

Co-requisite: Biology Laboratory 133

Professor Hull

BIL 133a Human Anatomy Lab 1-0-3

This laboratory course gives students a solid grounding in vertebrate anatomy through dissections and preserved material. Dissection material will include either in part or whole, several mammalian species including sheep, cat, cow, and pig. Material will focus on the recognition and development of the major organs and systems such as the skeletal, muscle, nervous, reproductive, excretory, and digestive systems. Although general mammalian structure will be examined, the relevance of these structures to human anatomy will represent the major focus of the course.

Prerequisite or Co-requisite: Biology 191 or collegial Biology.

Co-requisite: Biology 133

Professor Richardson

EXS 317a Biomechanics of Human Movement 3-3-0

This course provides an introduction to Kinesiology and the biomechanics of human movement, particularly the kinematics and kinetics of the musculoskeletal system. Qualitative evaluations of the mechanical causes of bone injuries in sports are also addressed. The course teaches concepts and techniques of analysis, with practical examples taken from sports and exercise, gait analysis, physical rehabilitation, ergonomics, etc.

Prerequisites: Exercise Science 127 and Biology 133

Co-requisite: Exercise Science 387

EXS 387a Biomechanics Laboratory 1-0-3

This laboratory course demonstrates concepts in kinematics and kinetics learned in Exercise Science 317, and introduces students to the methods used in measuring and analyzing human movements.

Co-requisite: Exercise Science 317

Prerequisite: Biology Laboratory 133

EXS 373a Advanced Exercise Science 3-3-0

This course examines selected topics in Exercise Physiology. Through traditional lectures, directed readings, seminars, and case studies, students will study short-term and long-term adaptations to exercise. We will also examine the scientific principles underlying sports-related topics such as optimizing exercise performance, injuries, and injury repair.

Prerequisite: Exercise Science 127 or Biology 226

Co-requisite: Exercise Science 383

Note: See Biology 333. Students may not take this course for credit if they have received credit for BIO 333.

EXS 383a Advanced Exercise Science Laboratory 1-0-3

This laboratory course will introduce students to functional and clinically applied anatomy and physiology. They will experience evaluation and treatments of various musculoskeletal conditions, with an emphasis on sports related injuries. The student will work in both clinical and field settings. Case studies, injury reporting, and injury research will enable the student to learn independently and apply lecture material.

Co-requisite: Exercise Science 373

Note: See Biology Laboratory 333. Students may not take this course for credit if they have received credit for BIL333.

II. ENGINEERING AND LIBERAL ARTS PROGRAM

The Engineering and Liberal Arts Program is the result of close co-operation between Bishop's University and the Université de Sherbrooke. This exclusive, double-degree program leads simultaneously to two Bachelor's degrees: a B.A. Liberal Arts, from Bishop's University (delivered in English), and a B.Eng. (either Civil or Chemical Engineering), from the Université de Sherbrooke (delivered in French). Students in this program will study at both Universities, in both of Canada's official languages, while benefiting from two unique university cultures.

This innovative joint program is unique in Canada and will produce a new generation of leaders for Québec and Canadian industrial and public life — bilingual graduates with superb technical expertise coupled with a solid general education. The program trains engineers who will be culturally grounded, critically minded and capable of effective communication in complex situations. Graduates will be professional engineers possessing a firm grounding in political

and social issues, with the capability of integrating engineering practice into a broad cultural and historical perspective.

The program is part of a co-operative system that alternates study semesters on campus with paid engineering work internships in the industrial or public sectors. French or English language upgrading is available for students who require it. The normal length of this dual-degree program is four academic years and one semester for students possessing the appropriate CEGEP DEC, with an extra year for those entering from high school systems in the rest of Canada (see the schedule below)

Entrance Requirements

Students enter the Engineering and Liberal Arts dual-degree program in one of two ways depending on their high school or college diplomas. In both cases, only students of the highest academic standing will be admitted, as admission is strictly limited. Candidates will normally possess strong linguistic skills in both official languages.

Candidates applying from the province of Québec must have a Québec college diploma (D.E.C.) in pure and applied sciences. These candidates submit their applications to the Faculty of Engineering at the Université de Sherbrooke, choosing either the Department of Civil Engineering or the Department of Chemical Engineering. Upon admission, the first year consists of two academic semesters at the Université de Sherbrooke, followed by a paid summer work internship in engineering.

Candidates applying with high-school diplomas from provinces other than Québec (or from the U.S.A. or elsewhere) must submit their applications to Bishop's University. Upon admission, the first year consists of two general science semesters spent entirely at Bishop's University, in English. In both the fall and winter semester these students must register in 18 course credits and 3 co-requisite laboratory credits, (for a total of 42 Bishop's credits) as follows:

	Bio 191	Introductory Biology
	Che 191	General Chemistry I + Che 081 (corequisite lab)
Fall	Phy 191	Introductory Physics I (Mechanics) + Phy 081 (corequisite lab)
	Mat 191	Enriched Calculus I + Mat 081 (lab/tutorial)
	Mla 116	Effective Writing for Engineers
	Che 192	General Chemistry II + Che 082 (corequisite lab)
	Phy 192	Introductory Physics II (Electricity and Magnetism)
Winter	Phy 106	Waves and Optics + Phy 085 (corequisite lab)
	Mat 192	Enriched Calculus II + Mat 082 (lab/tutorial)
	Elective Course (three credits from courses in English, History, Classical Studies, Philosophy, Religion or Liberal Arts)	

The summer following this first academic year can be spent in upgrading French language skills if required.

Students can receive credit for Bishop's general science courses after completion of AP (Advanced Placement) examinations. A minimum score of 4 is required:

Biology:	credit for BIO 191
Chemistry:	credit for CHE 191/081 and CHE 192/082
Mathematics BC:	credit for MAT 191/081 and MAT 192/082
Physics C-Mechanics:	credit for PHY 191/081
Physics C-Electricity:	credit for PHY 192/082.

Entry into the second year for students from outside of Quebec is contingent on achieving a 70% cumulative average in courses taken during the general science year. Following the general science year, all students in the Engineering and Liberal Arts dual-degree program embark on the following sequence of alternating semesters at the Université de Sherbrooke (S), semesters at Bishop's University (B) and paid work internships (W):

1st Year	FALL S1	WINTER S2	SUMMER W1
2nd Year	FALL S3	WINTER B1	SUMMER S4
3rd Year	FALL W2	WINTER S5	SUMMER S6
4th Year	FALL W3	WINTER S7	SUMMER W4
5th Year	FALL S8		

Included in the above schedule are two blocks of courses which must be completed at Bishop's University:

BLOCK A: (21 to 33 credits)

During the appropriate academic semesters at the Université de Sherbrooke (S1-S8), students must register in specified and elective credits to be taken at Bishop's. Thus in several of the engineering academic semesters, students will replace one or two of the regular engineering courses at Université de Sherbrooke, to enroll in replacement and elective courses at Bishop's University as described below

For students in Chemical Engineering, the following twelve credits must be taken at Bishop's: CHE 105 Organic Chemistry, MAT 210 Ordinary Differential Equations, ESG 266 Environmental Policy, and BMG 214 Creating a Business. These courses replace the equivalent courses in the regular engineering program at the Université de Sherbrooke: GCH 111, GIN 110, GCH 532, and INS 124. For students in Civil Engineering twelve specified credits must be taken at Bishop's: MAT 210 Ordinary Differential Equations, ESG 266 Environmental Policy, BMG 214 Creating a Business, and PHI 240 Topics in Professional Ethics. These courses replace GIN 110, GCH 532, INS 124, and GCI 635 in the regular engineering program at the Université de Sherbrooke.

Both Civil and Chemical Engineering students must register in a further nine credits of elective courses at Bishop's, chosen from the course offerings of the Division of Humanities or Social Sciences. These courses count towards the B.A. in Liberal Arts and one of these must be at the 300 level.

Finally, both students in Civil and Chemical Engineering may register in up to twelve additional elective credits from Bishop's courses which are recognized equivalents of Engineering courses at Sherbrooke. For students in Civil Engineering this list includes Esg 346 Urban Planning and Esg 354 Canadian Environmental Planning and Management.

BLOCK B: (18 credits)

During the winter of the second year of studies (or third year for out-of-province students) a complete semester of academic study will be taken at Bishop's University. Students must register in eighteen credits as follows:

Lib 20x	- the course in the Lib 210-217 rotation being offered
Humanities Elective	- one course from Classical Studies, History Philosophy or Religion
Literature Elective	- one literature course from English, Études Françaises et Québécoises or Modern Languages
Fine and Performing Arts Elective	- one course from Drama, Music or Fine Arts
Social Sciences Electives	- two (200 level or higher) courses from Sociology, Psychology, Political Studies or Environmental Studies and Geography

One of the three electives in Humanities, Literature or Fine and Performing Arts must be at the 300 level. Students should be aware that required prerequisite courses may need to be completed prior to the selected course(s) above.

For more information about this program, please contact the academic coordinators for this program:

Dr. Bruce Gilbert, Director, Liberal Arts Program,
Bishop's University, Sherbrooke, QC
819-822-9600 ext. 2075;
bgilbert@ubishops.ca

Kenneth Johns, Professeur,
Département de génie civil, Université de Sherbrooke,
Sherbrooke, QC J1K 2R1
819-821-8224
kenneth.johns@courrier.usherb.ca

III. ENVIRONMENTAL SCIENCE – MAJOR

The purpose of this program is to provide students with an interdisciplinary but thorough education in the science of the environment. A student will become versed in the chemical and physical aspects of the environment (atmosphere, energy, thermodynamics, fluid dynamics, etc.) with the goal of understanding global phenomena such as climate change, pollution, environmental impact, and resource management. Along the way, a student will gain knowledge of the Earth's ecosystems and how they are affected in both negative and positive ways by human activity. A broad selection of electives related to this field of study will allow students to pursue their own interests as they relate to the environment as well. Given that the search for solutions of complex environmental problems involves not only scientific, but also economic (and social and political) aspects, this program is designed with an Economics

component to better prepare the student in facing such issues in his or her professional life.

Students in this program will have the benefits of extremely small class sizes, individual instruction, an intimate environment, and mentoring professors. A student graduating from this program will be qualified to pursue further studies in graduate school or environmental law, or seek employment in the ever expanding fields and disciplines involving environmental issues.

Entrance Requirements

Students are considered for admission into a B.Sc. Environmental Science Major program after the completion of a Québec Diploma of Collegial Studies (DEC), or completion of a high-school grade 12, or the equivalent level of education from international origins. Students entering this program with a Diploma of Collegial Studies are admitted into a 3-year program of 93 lecture credits (including the English Writing Proficiency exam — EWP). Students entering with a grade 12 high-school diploma are admitted to a 4-year program of 123 lecture credits (including the EWP).

Entrance requirements are the same as those for other B.Sc. programs, namely:

- 1) Code R score at least 23 (for students with a DEC from a Québec cegep),
- 2) 75% average in 5 high-school grade 12 courses (including one math, one English and two other sciences; not including physical education).

Program Requirements

Students in the 3-year program must fulfill the following credit requirements:

English Writing Proficiency	3 credits	1 exam (or EWP 099)
Environmental Science core	33 credits	11 courses
Concentration Stream	21* credits	7 courses
Env. Studies and Geo. cognates	9 credits	3 courses
Economics cognates	12 credits	4 courses
Free Electives	15 credits	5 courses

Total 93 credits 30 courses

Students in the 4-year program must fulfill the following credit requirements:

English Writing Proficiency	3 credits	1 exam (or EWP 099)
U0 science courses	21 credits	7 courses
U0 humanities requirement	6 credits	2 courses
Environmental Science core	33 credits	11 courses
Concentration Stream	21* credits	7 courses
Env. Studies and Geo. cognates	9 credits	3 courses
Economics cognates	12 credits	4 courses
Free Electives	18 credits	6 courses

Total 123 credits 40 courses

* The "environmental physics" concentration stream requires 22 credits, since one of the required courses is 4 lecture credits (not the normal 3).

Notes:

1. Students with a Québec DEC who are missing some/all of the collegial equivalents of the seven Bishop's UO science courses: Bio 191, Che 191/192, Mat 191/192 and Phy 191/192 (see 4-yr program table below) will have these courses *added* to their 3-year program credit requirements, causing the total program length to extend beyond the normal 3 years.
2. Many science lecture courses have co-requisite laboratories, worth one additional "laboratory" credit. While the laboratories are mandatory, the lab credits earned do not count as lecture credits in meeting the program's total (lecture) credit requirements, as per the lists above.

Required Courses – 3 Year Program Schedule (90 lecture credits + EWP + labs)

	Fall	Winter
U1	ENV 101 (Intro. Env. Science) ENV 104 / ENV 184 (Anal. Chem.) ENV 105 / ENV 185 (Org. Chem. I) PHY 101 (Stats for Exp. Sci.) ESG 127 (Intro. Phys. Geog.)	ENV 144 (Intro. Environmental Chem.) ENV 167 (Thermal & Fluid Phy.) ESG cognate 1 (chosen from list below) Stream Course 1 FREE OPTION 1
U2	ECO 102 (Microeconomics) ENV 177 / ENV 187 (Ecology) ESG cognate 2 (from list below) Stream Course 2 Stream Course 3	ECO 103 (Macroeconomics) ENV 244 / ENV 248 (Env. Chem. II) ENV 277 / ENV 287 (Adv. Ecology) ESG cognate 3 (chosen from list below) Stream Course 4
U3	ENV 267 (Economy of the Env.) ENV 375 (Environmental Physics) Stream Course 5 FREE OPTION 2 FREE OPTION 3	ENV 377 (Ecological Economics) Stream Course 6 Stream Course 7 FREE OPTION 4 FREE OPTION 5

Required Courses – 4-year Program Schedule (120 lecture credits + EWP + labs)

	Fall	Winter
U0	ENV 101 (Intro. Env. Science) CHE 191 / CHE 081 PHY 191 / PHY 081 MAT 191 ELA 116	CHE 192 / CHE 082 PHY 192 / PHY 082 MAT 192 HUMANITIES OPTION FREE OPTION 1
U1	ENV 104 / ENV 184 (Anal. Chem.) ENV 105 / ENV 185 (Org. Chem. I) PHY 101 (Stats for Exp. Sci.) BIO 191 / BIL 191 ESG 127 (Intro. Phys. Geog.)	ENV 144 (Intro. Environmental Chem.) ENV 167 (Thermal & Fluid Phy.) ESG cognate1 (chosen from list below) Stream Course 1 Stream Course 2
U2	ECO 102 (Microeconomics) ENV 177 / ENV 187 (Ecology) ESG cognate 2 (from list below) Stream Course 3 Stream Course 4	ECO 103 (Macroeconomics) ENV 244 / ENV 248 (Env. Chem. II) ENV 277 / ENV 287 (Adv. Ecology) ESG cognate course 3 (from list below) FREE OPTION 2
U3	ENV 267 (Economy of the Env.) ENV 375 (Env. Physics) Stream Course 5 FREE OPTION 3 FREE OPTION 4	ENV 377 (Ecological Economics) Stream Course 6 Stream Course 7 FREE OPTION 5 FREE OPTION 6

Concentration Streams

In addition to completing the required courses listed above, all students must choose either the Environmental Chemistry, or the *Environmental Physics concentration stream*. There are 7 courses to complete in the chosen concentration stream as per the lists below.

Environmental Chemistry Stream – 7 courses*(courses with a * have an associated lab)*

CHE 102 Inorganic Chemistry (winter)
 CHE 103* Physical Chemistry I (winter)
 CHE 221* Elements and Minerals (winter)
 CHE 223* Physical Chemistry II (fall)
 CHE 225* Organic Chemistry II (fall)
 CHE 226* Organic Chemistry III (fall)
 CHE 227* Molecular Spectroscopy (fall)

Environmental Physics Stream – 7 courses*(courses with a * have an associated lab)*

PHY 106* Waves and Optics (winter)
 PHY 212 Electric Circuits & Electronics
 PHY 270 Ordinary Differential Eqns. (fall)
 CSC 111* Programming Methodology (fall)
 MAT 106 Advanced Calculus I (fall)
 MAT 107 Advanced Calculus II (winter)
 MAT 108 Matrix Algebra (fall)

Environmental Studies and Geography Cognate Courses

All ENV students (3-year and 4-year) must choose 3 ESG courses from the following list:

ESG 226 Oceans I
 ESG 227 Oceans II
 ESG 250 Geomorphology
 ESG 251 Soils and Vegetation
 ESG 265 The Atmosphere and Weather
 ESG 361 Glacial Environments
 ESG 367 Climate Change

Required Course List by components – 3 yr. Program (90 credits + EWP + labs)**I. Environmental Science Core (11 courses / 33 credits + labs)**

ENV 101 Introduction to Environmental Science
 ENV 104 / 184 Analytical Chemistry –
 An Environmental Approach (and lab)
 ENV 105 / 185 Organic Chemistry I (and lab)
 ENV 144 Environmental Chemistry I – Energy and
 the Atmosphere
 ENV 167 Thermal and Fluid Physics
 ENV 177 / 187 Introduction to Ecology (and lab)
 ENV 244 / 248 Environmental Chemistry II (and lab)
 ENV 277 / 287 Advanced Ecology (and lab)
 ENV 375 Environmental Physics
 ESG 127 Physical Geography
 PHY 101 Statistics

II. Concentration Stream (7 courses / 21 or 22 credits + labs)

All Env students choose one concentration stream as per the table above.

III. Environmental Studies & Geography Cognate Courses*(3 courses / 9 credits)*

All ENV students must choose 3 ESG courses from the list above

IV. Economics Cognate Courses (4 courses / 12 credits)

ECO 102 Introduction to Microeconomics
 ECO 103 Introduction to Macroeconomics
 ECO 237 / ENV 267 Economy of the Environment
 ECO 337 / ENV 377 Ecological Economics

V. Free Elective Courses (5 courses / 15 credits)

TOTAL **30 courses + labs**

Required Course List by components – 4 yr. Program (123 credits + EWP + labs)**I. UO Science and Humanities Requirements***(9 courses / 27 credits + labs)*

BIO 191 / BIL 191 Introductory Biology (and lab)
 CHE 191 / 081 General Chemistry I (and lab)
 CHE 192 / 082 General Chemistry II (and lab)
 MAT 191 Calculus I
 MAT 192 Calculus II
 PHY 191 / 081 Introductory Physics I: Mechanics (and lab)
 PHY 192 / 082 Introductory Physics II: Electricity and
 Magnetism (and lab)
 ELA 116 Effective Writing
 Humanities Elective Course 1xx – chosen from
 CLA, ENG, HIS, LIB, PHI, REL

II. Environmental Science Core (11 courses / 33 credits + labs)

ENV 101 Introduction to Environmental Science
 ENV 104 / 184 Analytical Chemistry – An Environmental
 Approach (and lab)
 ENV 105 / 185 Organic Chemistry I (and lab)
 ENV 144 Environmental Chemistry I – Energy and
 the Atmosphere
 ENV 167 Thermal and Fluid Physics
 ENV 177 / 187 Introduction to Ecology (and lab)
 ENV 244 Environmental Chemistry II
 ENV 277 / 287 Advanced Ecology (and lab)
 ENV 375 Environmental Physics
 ESG 127 Physical Geography
 PHY 101 Statistics

III. Concentration Stream (7 courses / 21 or 22 credits + labs)

All ENV students choose one concentration stream as per the table above

IV. Environmental Studies & Geography Cognate Courses*(3 courses / 6 credits)*

All ENV students must choose 3 ESG courses from the list above

V. Economics Cognate Courses (4 courses / 12 credits)

ECO 102	Introduction to Microeconomics
ECO 103	Introduction to Macroeconomics
ECO 237 / ENV 267	Economy of the Environment
ECO 337 / ENV 377	Ecological Economics

VI. Free Elective Courses (6 courses / 18 credits)

TOTAL **40 courses + labs**

Recommended Courses for Free Electives

Students in the four-year program must complete six free electives courses while the three-year students only complete five free electives. All courses in the concentration stream not chosen are recommended, plus any in the lists below:

Biology

BIO 110	Introductory Cell Biology
BIO 115 / BIL 115	Diversity of Life I (fall)
BIO 118 / BIL 118	Genetics (winter)
BIO 221	Biogeography
BIO 359	Human Genetics
BIO 360	Molecular Genetics

Biochemistry

BCH 192	Biochemistry of Biomolecules
BCH 338	Environmental Biochemistry and Toxicology

Chemistry

CHE 222 / CHE 282	Inorganic Chemistry III (winter)
CHE 224 / CHE 284	Physical Chemistry III (winter)
CHE 464	Computational Chemistry and Molecular Modeling
CHE 465	Topics in Advanced Organic Chemistry and Biochemistry

Mathematics

MAT 103	Environmental Modeling
MAT 109	Linear Algebra (winter)
MAT 279	Scientific Programming

Physics

PHY 117	Introduction to Mechanics (fall)
PHY 220	Statistical and Thermal Physics
PHY 271	Mathematical Methods of Physics (winter)

Environmental Studies and Geography

ESG 100	Introduction to Environmental Studies
ESG 126	Introduction to Human Geography
ESG 224	Human Impact on the Environment
ESG 249	Resource Management
ESG 266	Environmental Policy
ESG 267	Global Environmental Change: a Physical Perspective
ESG 358	International Environmental Issues
ESG 366	Ethical Perspectives on Environmental Problems

Marketing & Economics

ECO 270	Public Economics (winter)
BMK 350	Marketing Strategies for Environment Sustainability

Courses

ENV 101	Introduction to Environmental Science	3-3-0
This survey course introduces the student to environmental science from the physical, chemical, and biological points of view. Contents include a general introduction to the environment, energy, pollution, climate and weather, limits on renewable resources, and the Hubbert model. All of these topics are examined from a rigorous scientific perspective and include empirical analyses.		
ENV 375/PHY 335	Environmental Physics	3-3-0
This quantitative, calculus-based, course discusses fundamental environmental problems within a physical context. Topics covered include: the greenhouse effect, black-body radiation, the ozone problem, mathematical techniques, heat transfer, electricity, the transport of pollutants, plumes, and basic groundwater hydrology.		
<i>Prerequisites: Environmental Science 101; Environmental Science 167 or Physics 107.</i>		
<i>Note : See Physics 335. Students may not take this course for credit if they have received credit for Physics 335</i>		

IV. EXPERIENTIAL LEARNING

ELP 300	Experiential Learning Internship/Placement	3-1-10
Linked to the student's academic program, the student will be involved in an experiential learning activity (on his/her own or as part of a team) that will normally involve an internship/placement in an organization for 12-15 weeks approved by the Experiential Learning Committee of Senate and the internship/placement supervisor. Course work for the course will involve the preparation of an activity plan including goals, the work itself and a critical analysis on what was learned and/or accomplished during the internship/placement.		
<i>Prerequisite: ELL 200</i>		
ELL 200	Experiential Learning Lab	1-0-3
Linked to the curriculum of a regular course, the student will be involved in an experiential learning activity (on his/her own or as part of a team) in an organization that will normally involve 30 hours of official activity approved by the professor of the regular course. Such activity will be in addition to the work accomplished in the regular course to which the lab is affiliated. Course work for the lab will involve the preparation of an activity plan including goals, the work itself and a critical analysis on what was learned and/or accomplished during the activity.		
<i>Prerequisite: approval of instructor</i>		

V. B.A. MAJOR IN INFORMATION TECHNOLOGY**Information Technology**

Information Technology (IT) is defined by the Information Technology Association of America (ITAA), as the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware. IT deals with the use of electronic computers and computer software to convert, store, protect, manage, transmit and retrieve data, securely.

This program provides the necessary skills and knowledge to work/design/participate within organizations that manage large amount of data and provide services to a large number of users. Students will develop skills and knowledge in Information Technologies, Management practices and Organizations, with the required fundamentals of Computer Science^[1]

Core curriculum (33 credits):

CSC 101ab	Foundations of Computer Science	4-3-3
CSC 111ab	Programming Methodology	4-3-3
CSC 204ab	Data Structures	3-3-0
CSC 207a	Using and Designing Data Bases	4-3-3
CSC 214b	Introduction to Networks	3-3-0
BCS 220a	Management of Information Systems	3-3-0
BHR 221ab	Organizational Behaviour	3-3-0
BMA 140ab	Statistical Analysis for Business Decisions I	3-3-0
BMA141ab	Statistical Analysis for Business Decisions II	3-3-0
BMG 112ab	Introduction to Management Theory and Practice	3-3-0
ILT 100ab	Information Literacy and Critical Thinking Lab (1-credit lab – required with BMG 112)	1-0-1

Secondary Core^[2] (30 to 35 credits)

A minimum of 3 courses in Computer Science from the following list:

CSC 103	Interactive Web Page Design	4-3-3
CSC 107	Databases and Dynamic Web Design	4-3-3
CSC 121	Advanced Programming Techniques	4-3-0
CSC 201	Computer Ethics	3-3-0
CSC 205	Data Mining for Scientists	4-3-3
CSC 216	Artificial Intelligence	3-3-3
CSC 301	Simulation Techniques	3-3-3
CSC 304	Project	3-0-3
CSC 310	Software Engineering	3-3-3
CSC 414	Computer Networks	4-3-3
CSC 417	Database Software Design	3-3-0

^[1] *CEGEP students missing MAT103 and/or MAT203 will have MAT193 and/or MAT195 added to their program (up to 6 more credits).*

^[2] *Students are advised to consult the calendar for prerequisites*

A minimum of 3 courses in Business from the following list:

BAC 121	Principles of Accounting	3-3-0
BAC 241	Systems and Control	3-3-0
BCS 212	E-Commerce	3-3-0
BCS 216	Managing Information Technology	3-3-0
BCS 313	System Design and Development	3-3-0
BCS 318	E-Business Applications	3-3-0
BMK 211	Marketing Management	3-3-0
BMK 371	Industrial Marketing Strategy	3-3-0
BMS 303	Forecasting Techniques	3-3-0
BMS 333	Purchasing Management	3-3-0
BMS 231	Operations Management	3-3-0
BMS 343	Computer Simulation	3-3-0
BMS 332	Supply Chain Management	3-3-0

Free electives (22 to 27 credits)

The number of credits will depend on the courses selected in the secondary core.

Required extra courses in a four-year program: (30 credits)

MAT 193, MAT 195, a minimum of 6 credits of Humanities, including one course in English (ELA 116 or other) and another course in English, History, Classical Studies, Philosophy, Religion, Liberal Arts.

VI. INTERNATIONAL STUDIES**INT 300 International Development Assistance Internship**

Students must secure the approval of a Department and a faculty member in that Department to supervise an AUCC/Canada Corps Internship, a Champlain Regional College-Bishop's University Mai-Sot Internship, a Champlain Regional College Peru Internship or any other internship, sponsored by an NGO or accredited institution recognized by a Selection Committee, chaired by the Vice-Principal. Application for selection and funding must be addressed to the Vice-Principal's Office normally by December 1. The number of internships is subject to acceptance by sponsoring agencies and availability of funding.

VII. PRE-MEDICINE MAJOR

The pre-medicine program allows students to complete the pre-requisites for biomedical professional schools while at the same time pursuing a liberal arts education. The required and optional courses listed below correspond to the entrance requirements of Canadian medical schools, but also address the requirements of most related professional schools (such as dentistry or physiotherapy). Students must register in a separate, primary degree as well as the pre-medicine degree and complete all of the requirements of both degree programs in order to graduate. The primary degree may be awarded by any of the disciplines of Arts & Science (examples: B.Sc. in Biology, Biochemistry, Chemistry, Mathematics, Physics or Computer Science, B.C.S. combining Commerce and Science, B.A. in any of the disciplines of the Humanities or Social Sciences).

123 Credit / 93 Credit**U0 Courses for Non-Quebec Pre-Med Students:
Total Credits 30.**

Checklist of required courses for non-Quebec students registered in a B.Sc. program.

BIO191	Introductory Biology
CHE191	General Chemistry
CHE192	General Chemistry II
PHY193	General Physics I for Life Sciences I
PHY194	General Physics II for Life Sciences II
MAT198	Calculus I for Life Sciences
MAT199	Calculus II for Life Sciences
ELA116	Effective Writing (or other ENG)
HUM (CLA, ENG, HIS, REL, PHI or Lib. Arts)	
Free Option (One 3 Credit Course from any Division)	

Pre-Med Required Courses: Total 27 Credits.

The following courses must be taken in order to meet the requirements of the program.

CHE105	Organic Chemistry
CHE106	Organic Chemistry II
BCH211	Biochemistry I: Proteins
BCH275	Biochemistry III: Metabolism
PHY 101	Statistical Methods
PSY101	Introduction to Psychology
BIO110	Introductory Cellular and Molecular Biology
BIO226	Animal Physiology 1
BIO228	Animal Physiology 2

Pre-Med Required Options: Total 15 Credits.

Students must take the following number of options from the list below in order to meet the requirements of the program.

At least 2 Second Language Courses.

At least 2 Courses in English Literature

At least 1 Course from the Social Sciences.

Free Electives: Total 48 Credits.

The following are courses that are recommended but not required for writing the MCAT's.

BCH192	Biochemistry of Macromolecules
BIO133	Human Anatomy
BIO118	Genetics
BIO212	Evolution
CHE102	Structure and Bonding
CHE103	Introduction to Physical Chemistry
CHE104	Analytical Chemistry
CHE225	Intermediate Organic Chemistry
PBI275	Health Psychology 1
PBI276	Health Psychology 2

VIII. SOCIAL STUDIES MAJOR

The Social Studies major provides grounding in both History, and Environmental Studies and Geography through required foundation courses which introduce theoretical and methodological concepts associated with each discipline. Students are required to complete an equal number of credits in both disciplines, for a total of 48 credits, with upper level courses focusing primarily on Canadian society. The program is jointly administered by the Environmental Studies and Geography Department and the History Department.

Notes:

- The Social Studies Major is only available to students simultaneously registered in the major in Secondary Education.
- The Social Studies Major will only be granted to students who complete the Major in Secondary Education.
- Students registered in the Social Studies Major may not register in a Minor in either the History of Environmental Studies and Geography Departments.

Required courses**Environmental Studies:**

ESG 100	Introduction to Environmental Studies
ESG 126	Introduction to Human Geography
ESG 127	Introduction to Physical Geography
ESG 162	Canada: A Nation of Regions or ESG 163 – Introduction to Landscape and Cultural Geography
ESG 212	Urban Geography or ESG 266 – Environmental Policy
ESG 224	Human Impact on the Environment
ESG 260	Research Methods

One of the following:

ESG 226	Oceans I
ESG 265	The Atmosphere and Weather
ESG 269	The Earth's Crust

History:

Three of the following:

HIS 104	The Development of the West,
HIS 105	The 20th Century World
HIS 107	North America since 1860
HIS 109	New World: The Americas to 1850

Four of the following:

HIS 207	Canada 1867-1945
HIS 211	Canada Since 1945
HIS 221	Pre-Confederation Canada
HIS 265	Quebec: Political Change and Industrialization 1840-1930
HIS 266	Contemporary Quebec: 1930 to the present
AND 3 credits in European History	

Plus, sufficient elective courses to satisfy total program requirements.

IX. SPORTS STUDIES MAJOR (48 CREDITS)**Objective**

The Major in Sports Studies is an integrated program, drawing on the expertise of faculty in Psychology, Sociology, Politics, Business, and the Health Sciences. The program provides *an intensive study of sport and exercise in society*. The program is designed to encourage students to adopt an interdisciplinary perspective that gathers together the individual, local, national and international dimensions of sport and exercise. Consequently, it exposes students to the social, biological, political, business and economic aspects of sport in society. It also provides opportunities for practical experiences.

Program Outcomes

Employment opportunities will occur in sports organizations at the community and corporate level, as well as in volunteer programs to develop sports.

The program will also prepare students for further studies in areas such as recreation, leisure, sports management or journalism.

The Program (48 Credits)

Required Core (7 courses, 21 credits)

Optional Courses (9 courses, 27 credits).

The sequence is that most of the required core courses are to be taken first, followed by the optional courses. In addition, certain courses would have to be taken as prerequisites for others.

Required Core (7 courses, 21 credits)

SPO 201	Culture and Society
SPO 301	Athletes and Society
SPO 401 or SPO 402	
PSY 101	Introductory Psychology I (which is a pre-requisite to other psychology courses)
PSY 102	Introductory Psychology II (which is a pre-requisite to other psychology courses)
ELA 116	Effective Writing

A course in research methods. Students may choose from this list:

SOC 281	Communications
POL 261	Techniques of Empirical Research
PSY 213	Research Methods I (for which PMA160 or a commensurate statistics course is a pre-requisite)

Optional Courses (9 courses, 27 credits)

Within the Optional Courses, the program has three streams or concentrations:

Concentration 1: Sports Studies

(any 9 courses or 27 credits from this general multidisciplinary list of courses)

PSY 328	Occupational Health Psychology
PSY 275a	Health Psychology I
PSY 276b	Health Psychology II
PSY 203a	Sport and Psychology: Performance Enhancement
PSY 204b	The Social Psychology of Sport and Exercise
PBI 217	Motivation and Emotion
PBI 327a	Psychology of Nutrition
PBI 379	Clinical Neuropsychology
PBI 380b	Psychopharmacology
SOC 155	Sociology of Sport
SOC 219	Sociology of the Body
SOC 220	Work and Leisure
SOC 229	Communications: Gender and Culture
SOC 294	Sociology of Tourism
SOC 307	Sociology of Health
EXS 101ab	Introduction to Exercise Science And lab: EXS181ab Introductory Exercise Science Laboratory
EXS 373	Advanced Exercise Science (prerequisites needed) And lab: EXS 383 Advanced Exercise Science Laboratory
BIO 131	Human Body in Health and Disease (prerequisites needed)
BCH 191b	Survey of Modern Biochemistry: Nutrition from Science to Life
EXS 127b	Introductory Exercise Physiology
ECO 102	Microeconomics
ECO 204	Labour Economics
ESG 264	Outdoor Recreation (prerequisites needed)
BMK 362	Sport Marketing (prerequisites needed)
BHR 328a	Occupational Health and Safety (prerequisites needed)
CLA 130b	Sports and Games in the Ancient World
ENG 102	Media Studies
ENG 236	Popular Culture

Concentration 2: Health and Sports Studies

(4 courses or 12 credits from the following list of health courses and 5 courses or 15 credits from the courses on the general list)

PSY 328	Occupational Health Psychology
PSY 275a	Health Psychology I
PSY 276b	Health Psychology II
PBI 327a	Psychology of Nutrition
PBI 379	Clinical Neuropsychology
SOC 307	Sociology of Health
BIO 131	Human Body in Health and Disease
BCH 191b	Survey of Modern Biochemistry: Nutrition from Science to Life
BHR 328a	Occupational Health and Safety (prerequisites needed)

Concentration 3: Business and Sports Studies

(4 courses or 12 credits from the list of courses below and 5 courses or 15 credits from the other courses in the list)

BMG 112	Management Theory and Practice
BHR 221	Organizational Behaviour
BMK 112	Consumer Behaviour and Introduction to Marketing
BMK 211	Marketing Management

Sports Studies 201 Culture & Society

3-3-0

An interdisciplinary course focusing on the impact of sport on society. Topics include history and philosophy of sport, sport in the ancient world, its relationship to social identity, social hierarchy, media, film, popular culture, business and our economy.
(Team-taught)

Sports Studies 301 Athletes & Society

3-3-0

An interdisciplinary course focusing on the social implications of professionalizing sport. Topics include the role of media in professionalizing sport, its effects on amateur athletics, technology and sports, the proliferation of drugs in sport, the business models of sports professionals, the Olympic Movement and the Economy of the Games.

(Team-taught)

Prerequisite: Sports Studies 201

Sports Studies 401 Experiential Learning

3-1-10

The aim of this course is to integrate knowledge with a practical component. Although the content focus changes from year to year, the aim of the course is to expose students to the application of what they have learned. The course will mix seminars with practical placements. Topics may include: Marathon running, coaching, assisting in a community sports program, developing exercise programs in hospitals, homes for the aging, convents, or some other care-giving institution.

Prerequisite: Sports Studies 301.

Taken in the final 30 credits of the student's program.

Sports Studies 402 Independent Study

3-3-0

Students are expected to design and carry out research in an area related to Sports Studies. This can be original research, the development of a case study, or a program evaluation.

Prerequisite: Sports Studies 301

Taken in the final 30 credits of the student's program.



Services and Facilities

Student Services

Mission Statement

Student Services understands Bishop's University to be a learning community in which the student is the centre of our educational mission.

We commit ourselves to work together with students and with all partners, both teaching and non-teaching, to enhance the quality of student life so that each student may experience the fullest personal growth, enjoy a learning environment that is just, mutually respectful, and strives for academic excellence.

We support an atmosphere where both freedom of expression and civility are powerfully affirmed. Further, we endorse a disciplined community where individuals accept their reciprocal obligations for the common good; where well-defined procedures of governance guide behaviour; where service to students is encouraged; and where a caring community supports the well-being of each individual.

Finally, we support the University as a community in which the heritage of Bishop's is remembered, the contribution of students is honoured; where the rituals affirming tradition are acknowledged and the procedures governing change are widely shared.

Dean of Student Affairs

As a senior administrator and Officer of the University, the Dean oversees the overall coordination and quality of student services (Athletics, Campus Ministry, Counselling Services, Employment Resource Centre, Health Services, Residence Life, Leadership Development, and Security), and certain ancillary services (Arena, Bookstore, Conferences, Sports Centre, the Old Lennoxville Golf Course and Parking).

The Dean of Student Affairs is responsible for all matters of student conduct, for ensuring respect for the Charter of Student Rights and Responsibilities, and for the application of sanctions to students who are in violation of the Charter. Working closely with the SRC, his role is at times that of an advisor and partner on projects initiated either by the University or by the student government. At other times his role is to ensure the respect of the University's policies and to approve the use of University facilities for major student activities and events.

The Dean of Student Affairs is available to meet with students to discuss issues of University policy, to hear suggestions for the improvement in the quality of campus life and to receive complaints about areas under the jurisdiction of the Dean. The office of the Dean of Student Affairs is located in the Marjorie Donald building, room 220.

Ombudsperson

The major role of the Ombudsperson is to receive inquiries and complaints from any member of the University community who believes they have suffered some form of injustice, whether it has to do with academics or other matters. The Ombudsperson can normally give advice about where to go to have an issue looked into or reconsidered, or, after determining that all normal avenues of recourse and appeal have been exhausted, will investigate the fac-

tual basis of a complaint and, if appropriate, attempt to facilitate a solution using either formal or informal procedures. The Ombudsperson may also recommend changes to existing rules, policies, regulations or procedures, to make them more fair, or more clear and effective.

The Ombudsperson operates independently of all other offices in the University. Initial inquiries to the Ombudsperson are completely confidential until the complainant agrees to allow the Ombudsperson to act on the matter, at which point the matter remains confidential, restricted to those with a need to know.

The Ombudsperson must investigate all sides of a particular problem, must maintain a neutral stance throughout the investigation, and must strive to achieve solutions which are as fair as possible given the circumstances involved. At the end of an inquiry, the Ombudsperson will explain the nature of the chosen solution to those who initiated the complaint or, where the complaint has been found to be not justified, explain to the individual or groups involved the reasons for not continuing the investigation.

From time to time, the Ombudsperson may act as a mediator between individuals or groups of individuals in the University community who have been unable to resolve a conflict, particularly where no procedure exists for the resolution of such matters.

Please see the University website for further information, including the complete terms of reference for the Ombudsperson, and, especially, the Charter of Student Rights and Responsibilities.

Athletics and Recreation

Bishop's University offers its students and staff a diversified athletic program. It is divided into three categories, offering levels of competition and instruction to meet a variety of individual interests and needs.

- 1) Inter-university Athletics. Bishop's is a member of Canadian Inter-university Sport, and of the "Federation Quebecoise du Sport Etudiant", competing in Football, Men's and Women's Rugby, Women's Soccer, Men's and Women's Golf, Men's and Women's Basketball against other Quebec Universities. Women's Ice Hockey and Men's Lacrosse compete as Club sports.
- 2) Intramural Sports provides another level of competition in men's, women's and co-educational leagues and individual sports such as badminton, ball hockey, basketball, broomball, touch football, golf, ice hockey, water-polo, soccer, softball, squash, tennis, and volleyball.
- 3) Recreational Instructional Program offers a wide array of non-competitive, life-enhancing, instructional activities such as aerobics, yoga, and martial arts. Two separate brochures provide details about the Fall, Winter and Spring programs; these are available at the beginning of each session. For more information on courses, please call 819-822-9600 ext. 2666.

Athletic Facilities

The John H. Price Sports and Recreation Centre houses a double gymnasium for basketball, volleyball and badminton, with bleachers seating 1,200 spectators; a six-lane, 25-metre swimming pool

equipped with one meter diving board; squash courts, outdoor tennis, and facilities for gymnastics, combatives, aerobics, fitness, weight-training and indoor jogging. There is a spectator's level with a cafeteria-lounge leading to an outdoor patio. The complex provides the opportunity for sport and recreational experience to all members of the university community and plays a vital role in fulfilling the concept of total education at Bishop's. Other campus sports facilities include Coulter Field Stadium, a lighted 2000-seat stadium with a newly installed FieldTurf® synthetic surface; the W.B. Scott Memorial Rink; 10 outdoor tennis courts including 6 lighted play areas, a meticulously groomed 9-hole golf course, and a number of playing and practice fields.

Specific information concerning athletics can be obtained from:

The Director of Athletics

Bishop's University

2600 College Street

Sherbrooke, Quebec J1M 1Z7

Visit our website at: www.ubishops.ca/gaiters

Sportsmedicine

The Sportsmedicine clinic provides services to our student-athletes, the general student population and community patients alike. This arrangement and quality of care is rarely found in Canadian universities. The clinic benefits from the most modern equipment available, and is staffed by three certified athletic therapists, an orthopaedic surgeon, physiotherapists and student assistants.

Campus Ministry

The ecumenical campus ministry is supported jointly by the University, Champlain Regional College, the Anglican, Roman Catholic and United Churches, and St. Mark's Chapel. The Campus Ministry office is located in Room 216, Marjorie Donald House (telephone 819-822-9600 ext 2718), and the Campus Minister is available for counselling and pastoral care. Campus Ministry also sponsors speakers, Bible study, discussion groups and other programs from time to time during the academic year. There is a chapter of Inter-Varsity Christian Fellowship.

Counselling Service

Professional counsellors are available to help students deal with personal concerns related to adapting to university life, family problems, relationships, difficulties with drugs and alcohol, and other matters, all of which are handled in complete confidentiality. Services are also provided to students wishing to enhance their study skills as well as those wishing to focus on career planning. Workshops on topics of interest to students are scheduled throughout the academic year. The Counselling Service maintains a resource centre, with current information on Canadian, American and overseas universities, as well as other study and career reference materials and self-help books and periodicals. Information and application forms for standardized graduate examinations (GRE, GMAT, MCAT, etc.) are also available at this office. The Counselling Service in addition coordinates services to students with special needs and administers a peer tutoring program (please see separate listings).

While individual appointments may be scheduled most weekday evenings, the general office is open Monday–Friday, 8:30 a.m.–noon, and 1:00 p.m.–4:00 p.m. The Service is located in Marjorie Donald House, Room 214, 819-822-9600 ext. 2695.

Career & Employment Service

The primary purpose of the Career & Employment Centre is to offer educational and career guidance services to students. These services include: career counseling, employment counseling, assistance with obtaining an off-campus Canadian work permit, job search strategy as well as preparation for interviews. Workshops covering some of these topics are also offered throughout the school year. Career counseling services, workshops and activities are offered in a group format and available, on an individual basis.

In addition, the Career & Employment Service arranges on-campus recruiting for interested employers and regularly posts internships, career, part-time, and summer employment opportunities for students. The Career & Employment Centre is located in the Marjorie Donald Building, Room 214. Office hours are from 9:00 a.m. to noon – 1:00 p.m. to 4:00 p.m. from Monday through Friday. Telephone: 819-822-9600 ext. 2695. For information about our services, you may also visit our website at www.ubishops.ca, Life at Bishops, Counseling & Special Needs.

Peer Tutoring Program

Students who are having difficulty with one or two courses may receive tutoring from a qualified senior student who has already completed that course. Students receiving tutoring are required to pay a nominal hourly charge for this service. Students and potential tutors are invited to register at the Counselling Service, Marjorie Donald House, Room 240, 819-822-9600 ext. 2695.

Special Needs Students

Within the scope of its resources, the University tries to help students with special needs to complete their programs successfully. Applicants to Bishop's who have learning disabilities, or who require other forms of special support, are urged to communicate with Counselling Services (Room 217, Marjorie Donald House; 819-822-9600, ext. 2695) before applying to Bishop's.

In the case of a learning disability, a formal diagnosis and assessment is required; in all cases early identification of needs is extremely important.

Health Services

The Champlain-Bishop's Health Service is located in Mackinnon Hall, Room 114 and offers health care to all full-time students and any part-time student who has paid the student services fee. Staff and faculty may use the service for a small fee. The staff at Health Services will do everything possible to treat illnesses and injuries quickly so that class absences will be kept to a minimum.

Some of the services offered include diagnoses and treatment of acute and chronic illness, emergency care, routine physicals, sexually transmitted infection testing and information, pregnancy tests, contraception, wart treatment, allergy shots and certain vaccinations. This is only a partial list of services offered; please inquire about any other medical needs.

The staff includes nurses, a physician and a secretary who are available Monday through Friday. Students wishing to see the nurse will be seen in order of arrival. To see the doctor, it is recommended that you make an appointment. Emergency situations will always have priority.

Records are strictly confidential. No information is released, for any reason, without the student's consent.

Health Services are supported by student fees, therefore, there is no charge to use the service. However, the doctor's services and the cost of any tests required are only paid by health insurance or provincial medicare plans.

Quebec students who do not have their Medicare cards, or who present cards that have expired, will be required to pay the full cost of services immediately.

Canadian students from another province are fully covered by their provincial medicare plans provided they:

- 1) inform the Ministry of Health in their home province that they are studying in Quebec before they leave home;
- 2) have their Provincial Medicare card with them when they come to see the doctor. If the card is unavailable or has expired, the full cost of services must be paid immediately.

International students (including Exchange students) must subscribe to the Health and Hospitalization Insurance plan offered through the University. Details of this plan can be obtained from the Business Office. The plan entitles the student to full medical coverage both here and at local hospitals.

International or exchange students from France, Denmark, Sweden, Norway, Finland, Luxembourg, and Portugal are eligible to apply for a Quebec Medicare card. This should be done as soon as possible after their arrival in Quebec. Information on how to apply can be obtained from Health Services or from the International Student Coordinator.

Anyone requiring further information about Health Services should telephone 819-822-9600, ext. 2696, or at www.ubishops.ca, Life at Bishops, Health Services.

Residence Life

At Bishop's University we believe in the residence experience as an integral part of the university experience and thus guarantee all of our first-year students a place in residence.

Bishop's University residences can accommodate 680 students in Traditional Style Residences, "Bog" Style Residences and Suite Style Residences. These three choices of residences provide students with the opportunity to choose the residence that suits their individual life style. Mackinnon and Norton/Pollack are our traditional style residences accommodating students in both single and double configurations. Kuehner, Abbott and Munster are our "Bog" Style Residences. These "Bogs" accommodate students in single rooms with adjoining bathrooms. Please note that Munster is unique in that it is a 24 hour quiet residence. Our newest residence, Paterson Hall, accommodates four students per suite. Each student has their own bedroom but shares a common kitchen, living room and two full bathrooms. All of our residences have mandatory meal plans.

An important part of the Residence life program is the support that students receive while living in residence. This support comes from a well trained staff of upper year students who are employed as Resident Assistants. They reside in the residences and help students with their transition to university life, while promoting a community atmosphere that focuses on mutual respect and consideration for all its members.

Students will receive information on residence and can go online to apply once they have been admitted to the university. We encourage students to fill out their online application and follow up with their residence deposit as soon as possible as the priority for

residence is based upon the date we receive your deposit.

For more specific information, contact:

Residence and Conference Services
Bishop's University
2600 College Street
Sherbrooke, Quebec J1M 1Z7
Tel: 819-822-9600 ext. 2685
Fax: 819-822-9615
e-mail residence@ubishops.ca

Off-Campus Housing Service

The Off-Campus Housing Service provides students with a list of housing in the community. The lists are available on the Bishop's University website: www.ubishops.ca; simply click on Future Students and then Living at BU and you will find Off-Campus Housing. You may also contact the office if you have any questions at 819-822-9600 ext. 2685 or via e-mail at residence@ubishops.ca

Those who would like to add housing opportunities to our list may contact us as above, or by fax at 819-822-9615.

Student Leadership Development Office

L.E.A.P. Program

Would you like credit for your extra-curricular involvement? **The Leadership and Extra-Curricular Activity Profile (L.E.A.P.)** is administered through the Student Leadership Development Office. Enrolment in the L.E.A.P. program is completely voluntary and must be initiated by the student. Students are encouraged to enroll in this program as soon as they arrive in September and are responsible for updating their profile on a semester basis. At the end of their university career, students who have enrolled receive a L.E.A.P. certificate. This is an official document designed to verify and validate a student's leadership roles, organizational memberships, and other significant involvement in activities outside of the classroom. The L.E.A.P. certificate may be used to complement a student's resume and academic transcript for applications to graduate school or to present to prospective employers.

Other services provided by this office include leadership workshops on relevant topics and the annual Leadership Week. You won't want to miss it!

Success Coaching

Adjusting to university life can be both exciting and overwhelming. Success coaching is about learning and making changes that support your growth, development and well-being while enhancing your capacity to deal with life transitions and challenges. Develop the skills that can help you become more successful in school and life in general. You'll work closely with a professional coach as you move towards your goals and learn to be accountable for your results. Students who have engaged in coaching have found it extremely helpful in areas such as planning and goal-setting, organizational skills, time management, creating more balance in their life, stress management, interpersonal skills, or enhancing their leadership effectiveness.

For additional information about the L.E.A.P. program, leadership activities and success coaching, please contact the office at (819) 822-9600 ext 2255 or send an email to Diane Houde, dhoud@ubishops.ca. The Student Leadership Development Office is located in the Marjorie Donald Building, Room 223.

Security and Parking

The Bishop's Security Department is responsible for ensuring the safety and security of everyone on campus by enforcing the established rules, regulations and policies of the University. Working in conjunction with Student Safety, residence assistants and the parking attendants, our Security Officers are available 24 hours a day, seven days a week to provide emergency assistance.

In addition to monitoring security on campus through regular patrols, the Security Department manages all parking and driving regulations on campus, acts as a liaison between the University and the municipal police, and works with the student population in ensuring safety and crime prevention on campus. They also manage and maintain an inventory of all lost and found items on campus.

Parking regulations are available at the Security Office and on Security's web link. Students should have a copy of these regulations. For general guidance, all cars on campus must be registered through the Security Office and a parking permit for the current year must be issued.

For further information on parking regulations, policy enforcement, protecting yourself or your property, safety regulations and anything else that is related to security on campus, please refer to the Security link on the Bishop's website (www.ubishops.ca) or drop by the Security Office.

In case of an emergency, you may contact Security 24 hours a day at the numbers provided below.

Location: Dewhurst

Tel.: Ext. 2711 (internal lines) or
819-822-9711 (off-campus line)

Hours: Monday–Friday (for parking permits)
8:30 am–noon and 1:00 pm–4:00 pm

Student Government and Student Activities

Students' Representative Council (SRC)

The Bishop's University Students' Representative Council, founded in 1893, is an autonomous organization representing full-time students. The SRC represents students on most committees at Bishop's including Academic Senate, and the University Board of Governors. The S.R.C. also represents Bishop's students at the provincial and national levels.

The SRC provides a number of services for students. Through the Social Department, the S.R.C. funds both academic and non-academic clubs. The S.R.C. is also responsible for the production of multiple publications including the Mitre Literary Journal and the Quad Yearbook. The S.R.C. is also responsible for the organization of many different events on campus ranging from Orientation Week to Frosh Week and Graduation Formal. The SRC offices, located on the first floor of the Student Union Building are open daily.

The S.R.C. is governed day-to-day by a Board of Directors composed of the President, VP Academic, VP Student Affairs, VP Social, Director of Finance, and General Manager. Along with five Student Senators, four Student Event Coordinators, four Student Affairs Representatives, and one Corporation Representative, the Board of Directors forms a seventeen-member Executive Council convened twice a month.

Mandate

- i) To act as official representative of the students of Bishop's University in their relationship with the faculty, staff, and administration of Bishop's University as well as with other student organizations and the community at large.
- ii) To promote the welfare and interests of the students of Bishop's University, including the promotion of artistic, literary, educational, social, recreational, and charitable activities for the advancement of the interests of the members of the Students' Association, the community, and others.
- iii) To promote a sense of responsibility and co-operation among members in the achievement of these objectives.
- iv) To safeguard the rights of the individual students of Bishop's University, subject to the Bishop's University Charter of Rights and Responsibilities and the Canadian Charter of Human Rights and Freedoms.

Representation

Most committees at the university have at least one student representative. It is the role of the SRC to ensure that student concerns are heard. The SRC also represents students on Senate (the highest academic body at the university) and on Corporation (the highest non-academic body).

Clubs:

These are some of the current student clubs under the SRC:

Academic Clubs

Bishop's Biology Club; BUGS (Geography); Debating Club, English Literature Club; History Soviet; PSA (Political Studies); Sociology

Hobby/Interest Clubs

BU Boarders Association; Ultimate Frisbee Club; Outdoors Club

Lifestyle Clubs

BU Pride Alliance; Bishop's/Champlain Christian Ministry; Caribbean-African Students' Association

Public Service Clubs

Bishop's Environmental Club; Best Buddies, Big Buddies; Amnesty International

SRC Publications:

The Student Agenda - Freely distributed to first-year students and sold to all others. The Student Agenda is a great way to stay organized. It is especially useful for first year students, offering information on Bishop's University policies, and helpful hints on life at Bishop's

The Mitre – This collection of poetry, stories, artwork, and photographs is the oldest university literary publication in Canada (1893). It is produced annually and collects submissions from students, faculty, alumni, and the local community.

The Quad – The Bishop's Yearbook is one of the treasured souvenirs of the university. It is published each year and lovingly compiled and edited by a team of students.

The SRC Website – This website allows for direct communication between students and executives via an open forum while also offering students information on upcoming events, activities, clubs, job openings, elections, etc. Check it out at www.busrc.com.

SRC Operations:

The Gait

The Gait is the on-campus pub open each Tuesday, Thursday and Saturday, and is also available for booking special events. With a 365-person capacity, the Gait provides employment for students, as well as providing a safe environment for drinking. Popular Tuesday and Thursday “Happy Hour” is typically attended by faculty, staff and students. The Gait is located on the ground floor of the Student Union Building and is run and staffed by students.

Doolittle’s Convenience Store

Doolittle’s is the student-operated general store on campus which offers grocery items, bus tickets, and sells tickets for on-campus events. The store is open seven days a week and is managed and staffed by students.

SRC Awards to Students:

SRC Merit Award

This award goes to the student(s) who, in the opinion of the S.R.C., has/have rendered outstanding service to the SRC in many areas.

Purple Letter Award

This award is given to those students who have made a consistent contribution to the life of the university and community and who might not otherwise be recognized for their efforts. Award winners are nominated by members of the university and the community.

Ray Lawson Award

The Ray Lawson Award is given to the undergraduate who, in the opinion of the SRC table, has contributed the most to the life of the university.

Joseph E. Cassar Award

The award chosen by the SRC Table is given to the student who has contributed the most to the SRC during the past year.

Golden Mitre Award

The Golden Mitre Awards are the highest non-academic honour that graduating students can receive. Recipients are elected by popular vote of the prospective graduating class.

Bishop’s Experience Award

The Bishop’s Experience Award, founded by the SRC Executive of 2001/2002, is an award given to a student who exemplifies the “Bishop’s Experience” - through campus leadership, athletics and/or community involvement.

Non-SRC Campus Organizations:

BUCS – The Bishop’s University Commerce Society sponsors student conferences, guest speakers, interview simulations, and much more.

ACE*Bishop’s - ACE*Bishop’s is an organization on campus that allows students to become involved further in their community. ACE*Bishop’s has a variety of divisions including financial education programs for high school and small business consulting. This is an organization that allows students to work in a team environment and apply theories learned in class.

The Campus – The bi-weekly student newspaper is run independently and is available for both on and off campus students. The Campus can be found online at www.thebucampus.ca

Golden Key Honour Society – Undergraduates who rank in the top 15% of their division and who have completed at least one year of successful academic study become members by invitation. Membership in Golden Key acknowledges exceptional ability to perform at a high level in university. Benefits of membership include academic recognition, potential scholarships and awards, opportunities for both national and international networking, leadership and community service options as well as exclusive job/career opportunities.

Other Services and Facilities

Book Store

The University Book Store is located in the mall of Marjorie Donald House. The store carries required texts as well as reference materials, educationally-priced software, art supplies, CDs, stationery supplies, and a large selection of current bestsellers, classics, new releases, and more in the general reading section. Special orders for books can be accepted. Greeting cards, class rings, crested clothing, bags and gift items are also available. Textbooks can be ordered online at www.efollet.com. Visa, MasterCard and debit cards are accepted. The Book Store is open Monday through Friday, from 8:30 a.m. to 5:00 p.m. and Saturday from 10:00 a.m. to 4:00 p.m.

Campus Tours

If you are interested in visiting the Bishop’s University campus please visit our website www.ubishops.ca under “Prospective Student” where you will be able to find a virtual tour, information on admission requirements, financial aid, student services and academic information.

The best way to experience the university firsthand is to come and see it for yourself. Tours given by student ambassadors are available year round, although we recommend that you visit during the regular academic year (September to April). Please contact the Recruitment Office at least one week in advance, to arrange for your own personalized campus tour at your convenience. You may also want to attend one of our “Super Saturdays”, Bishop’s version of an open house. For more information, please contact:

Recruitment Office

Bishop’s University
2600 College Street
Sherbrooke, Quebec
J1M 1Z7
877-822-8200
819-822-9600 ext. 2681
recruitment@ubishops.ca

Information Technology Services

ITS, comprising the Client Services Centre, the Print Centre, and the Cole Computer Centre, provides a range of technology services for students, faculty and administrative staff.

The **Client Services Centre**, located in the Johnson Building, supports 30 multimedia classrooms; the Language Lab and the Music Room; and provides classroom equipment, videotaping, projection, scanning, CD/DVD-writing and colour printing services.

The **Helpdesk**, also located in the Johnson Building (J107), is available to answer computer and network related questions.

The **Print Centre**, located in the basement of the McGreer Building, provides large-volume copying, printing, binding and course-pack production.

The **Cole Computer Centre** maintains the main computer systems for the university. A high-speed network serves administrative and academic offices, research, library, residence and student lab needs. Internet and internal networking is provided for Windows, Mac and Unix servers and about 700 desktop computers. Wireless connectivity is provided in the library, and also to many parts of the campus.

Standup e-mail work-stations for all students, staff and faculty are located around the campus. The Centre maintains all equipment and systems, and also provides management, development and support for a general suite of desktop applications, institutional data and business processes, and the official Bishop's University web page. Six general-purpose (including a new iMac dual boot lab in the Library) and several departmental labs provide a ratio of one computer for every 10 students, 15 laptops are available to students for Library work and many courses offer online material. All residence rooms are wired, and almost 90% of residence students bring their own computer.

ITS provides part-time employment and workplace experience for more than 20 students each year.

Cormier Centre of International Economics

The Cormier Centre was founded in 1989 to promote research in international economics, to study the impact of economic policy on business, and to contribute to economic information, communication and education. The Centre sponsors conferences and visiting scholars, supports research projects and promotes academic/business joint projects with an international orientation.

For information, contact: Dr. Marianne Vigneault, e-mail: mviigneau@ubishops.ca.

Cultural Affairs

Superb facilities support a dynamic cultural life on the Bishop's campus. With direct support from the Student Services fees, Centennial Theatre and the Florence Foreman Art Gallery bring performances and exhibitions of international calibre into the campus community throughout the academic year. Student participation in all aspects of the arts — from helping to select programming to mounting productions — is encouraged not only in Centennial Theatre and the Art Gallery, but also in the venues of Bandeen Recital Hall and the Turner Studio Theatre. Work-study programs in all the cultural venues offer hands-on experience in virtually every aspect of the cultural industry: programming, promotion, technical production, marketing and arts management. In addition, there is plenty of opportunity for volunteer participation.

Artists who have recently visited campus include Leahy, The Gryphon Trio, The Rubberbandance Group, Berlin's 17 Hippies, Holly Cole, Theatre of Early Music and The East Village Opera Company.

In addition to live performances, Centennial Theatre is home to English-language movies. Weekly screening of recent, popular films; a week-end matinée series of children's films; and a repertoire-style cine-club make up the programming. Festivals of student-directed and written plays, an extensive schedule of musical productions and a wide-ranging series of visiting lecturers add richness to cultural life on campus.

Curry Wildlife Refuge

A three-hectare wetland conservation area on the Bishop's campus serves as a field laboratory and observation area for biology, environmental studies and geography students, as well as a focus for local birdwatchers and naturalists. Named after Bishop's alumnus and donor Peter D. Curry, in recognition of his commitment to both conservation and education, the wetland was developed with the co-operation of Ducks Unlimited.

Daycare

The Panda Daycare Centre, which is located on the Bishop's campus, has space for 72 children from newborn to 5 years of age. Interested parents are urged to make application as early as possible. For information, telephone 819-346-1414.

Dobson-Lagassé Centre for Entrepreneurship

The Centre is a co-operative venture funded by the John-Dobson Foundation, the Lagassé Family Foundation, the SEED Foundation, Bishop's University, and several private individuals and organizations. It is located on the Bishop's Campus and is affiliated with the Williams School of Business.

Established in 1998, it has a dual mission: to broaden student entrepreneurship education and prepare them for life's projects, and to stimulate entrepreneurship in the Eastern Townships in cooperation with other organizations dedicated to similar purposes. The Centre also provides guidance and services for Bishop's University members of ACE, the National Association of Student Entrepreneurs.

The Centre works very closely with the Williams School in the teaching of Entrepreneurship at the University. A sequence of 3 courses in Entrepreneurship is open to all Bishop's students.

The introductory course is offered each semester and uses new venture creation and the production of a business plan as a focus.

A second guided study course focuses on opportunity recognition, feasibility analysis and risk management and requires detailed analysis of live entrepreneurial situations & community development needs.

The third course also entails working with a live business and relies on the student's past experience to take a leadership role and guide the project to a successful outcome for the entrepreneur. The live case experience is complemented by lectures in advanced entrepreneurship and workshop-style tutorials.

Interaction with community organizations and businesses is a key element in the program. Students in the two advanced courses work with entrepreneur businesses on specific projects coordinated by the Centre. A co-op program in the student's field of interest is available on a selective basis.

A minor in entrepreneurship is offered to students who are not enrolled in a business program. The Bishop's Liberal Arts experience is clearly enhanced from the exposure to entrepreneurship, taught in the context of the pursuit of an opportunity in any field.

For more information visit our website at:
www.ubishops.ca/dobson-lagasse or, contact us directly at:

The Dobson-Lagassé Entrepreneurship Centre,
4, Harrold Drive, Bishop's University.
819-822-9600, ext. 2701, Fax: 819-822-9731
or by e-mail: entrepdb@ubishops.ca.

Eastern Townships Research Centre

The ETRC was established in 1982 to foster and stimulate research on historical, cultural and social aspects of the Eastern Townships. Located in the Old Library (McGreer Hall), it serves as a resource centre for the academic community and for organizations and individuals engaged in regional research projects. There are periodic conferences, colloquia, and visiting speakers. The ETRC Archives Department, accredited by Quebec's Ministry of Culture and Communications since 1991, is open from 8:30 to 12:00 and 1:00 to 4:30 Monday through Friday. The ETRC also publishes various research tools, the biannual Journal of Eastern Townships Studies (JETS), and a biannual newsletter. For information: Jaroslava Baconova, Interim Director 819-822-9600 ext. 2647, or Jody Robinson, Archivist, ext. 2261.

Financial Aid

The Financial Aid Office located on the 1st floor in McGreer provides students with information and assistance in applying for various federal and provincial government loan and bursary programs. Further information can be obtained from the University's Business Office at 819-822-9600 ext. 2655 or 2208.

Florence Foreman Art Gallery

As a vibrant part of university life at Bishop's University, the Foreman Art Gallery serves as a strong link to the community of Lennoxville and Sherbrooke as well as an active site of scholastic research about contemporary art and curatorial practice. The Gallery is named in honour of the late Florence May Foreman, formerly of Vancouver B.C., who left to the University the largest bequest in its history.

Presenting visual art exhibitions by emerging and mid-career professional artists, the Gallery seeks to challenge viewers by fostering a climate conducive to intellectual inquiry and reflection about contemporary Canadian and international art. Hosting lectures, symposia, guided tours and workshops, as well as film and video screenings, the Gallery is committed to developing educational initiatives which provide viewers with the interpretative tools that stimulate curiosity while facilitating a greater understanding of the thematic undercurrents of its exhibitions. In order to fulfill its research mandate, the Gallery publishes free brochures and award winning exhibition catalogues. The Gallery is also an important site for students - internships and volunteers opportunities are available

and a curated exhibition of art by graduating fine arts students is presented each year in April.

Admission to the gallery is free. The Foreman Art Gallery is located adjacent to the lobby of Centennial Theatre. Hours: Tuesday-Saturday, from 12:00 to 5:00 p.m., and all evenings when Centennial Theatre is open. For general information:

Vicky Chainey Gagnon, Curator

Geneviève Chevalier, Co-curator

819-822-9600, ext. 2687

Gallery: 819-822-9600, ext. 2260

Fax: 819-822-9703

Website: www.ubishops.ca/foreman

Bishop's University also has a permanent art collection consisting of some 200 works, with an emphasis on Canadian art from the 19th and 20th centuries. Works are displayed in buildings across the campus and also at the Foreman Art Gallery through the exhibition series "Connections" where members of the faculty, staff and students are invited to present a work from their point of view. A catalogue of the collection is available from the Collection Curator: Merrylou Smith (819) 822-9600, ext. 2561

International Exchange Program

www.ubishops.ca/int-exch/index.html

Bishop's University encourages all students who qualify to spend a semester or two abroad at one of our 700+ linked campuses around the world. Pre-approved course credits taken on exchange are transferred to your Bishop's degree. Marks/grades obtained at the host university are not included in the calculation of your cumulative average at Bishop's upon your return. Students may continue to receive financial aid for which they are eligible at Bishop's.

To be accepted into the Exchange Program Bishop's students must meet the following criteria:

- obtain and maintain a 70% cumulative average in the equivalent of at least one year of full-time study prior to departure to a host university
- assume travel and living costs, health insurance, and personal expenses, during their exchange abroad
- receive permission to participate from the Dean of their respective academic program
- demonstrate proficiency in the language of the host university

Tuition and fees (for 12-15 credits) are paid to Bishop's, and in most cases, accommodation and meals are paid to the host university. Additional criteria may pertain in some exchanges. Students planning to apply are asked to consult with the Coordinator in the International Student Office (McGreer 210), and then with their Dean. Students must obtain prior approval from their program chair at Bishop's for all courses they intend to take at their host university.

International Student Advising

Bishop's University extends a warm welcome to all Exchange and International Students and our campus provides the perfect opportunity to become fully immersed in student life while learning and living alongside both the Francophone and Anglophone communities. International and Exchange Students play an important role at Bishop's, enriching our diversity, and the International Student Office is devoted to supporting these students for the duration of their stay.

Coordinator of International Students Coordonnatrice pour étudiants étrangers

Bishop's University
2600 College Street
Sherbrooke, Quebec
J1M 1Z7 CANADA
Tel: 819-822-9600 ext 2212
Fax: 819-822-9661
Email: lrogerso@ubishops.ca
www.ubishops.ca

Library

The John Bassett Memorial Library houses a collection of nearly 600,000 items including books, journals, sound recordings, video and DVD recordings and other audiovisual and non-print materials. In addition, online periodical databases and numerous electronic resources provide extensive access to information in all disciplines. Both Boris, the online catalogue, and most of the library's electronic resources can be searched from on or off campus through the library homepage. The Interlibrary Loan service, which is free of charge, provides access to additional resources not available in the Bishop's University library.

The facilities include ten seminar rooms and numerous areas suitable for group study as well as individual study carrels for more than 400 users. There are several comfortable lounge areas including the periodical reading room where students can relax, chat with friends and enjoy a snack or a drink. A greatly enlarged and improved space houses the music collection and listening stations provide access to the extensive collection of records and CDs. There are several areas in various parts of the library for the viewing of videos and DVDs. The Language Lab includes eight workstations dedicated to special language learning software and three private cubicles for oral practice. Students have access to iMac computers in the CP Computer Lab and wireless laptops are available for use in the library. The library is completely wheelchair accessible.

Orientation sessions are conducted by the Reference Librarians throughout the year. The sessions, usually presented to individual classes, can be general and introductory or designed to meet the needs of a specific class or address a specific topic. Librarians also teach one-credit courses in information literacy and critical thinking which are taken as lab components of research-based courses offered through the individual divisions. All the sessions are taught in the library classroom, which is equipped with wireless laptops allowing for interactive learning and practical experience. Individual assistance is available at the reference desk or an appointment can be made with a librarian for extended private instruction. Guides and study aids for research in all academic disciplines are available in print or on the library's webpage.

The Archives and Special Collections Reading Room is located in the Old Library, McGreer Hall. This room, which was the original location of the University library, has been restored and now serves as the reference/reading area for the University's archives, the Library's special collections and the Eastern Townships Research Centre. Special collections have been developed in a number of fields including religion, philosophy, history, fine arts and literature. These include rare books, historical pamphlets, maps, microfilms as well as archival material. The P.H. Scowen Eastern Townships Historical Collection is an important resource for historians and other researchers. The Mackinnon Collection of Canadiana includes many rare and valuable books and pamphlets relating to Canadian history and biography. Materials in the Belanger-Gardner Collection are devoted to the history of world civilization. Rare and unusual books of 17th and 18th century theology, history and literature have been donated from the personal libraries of such prominent people as the Rev. George Jehosaphat Mountain, 3rd Anglican Bishop of Quebec and co-founder of the University.

More detailed information, such as hours of service, staff members, new acquisitions lists, etc. can be obtained by consulting the Bishop's University Library webpage at http://www.ubishops.ca/library_info/

Mathematics-Statistics Help Centre

The Math-Stats Help Centre is located in Johnson 4. Our friendly, knowledgeable staff help students individually or in small groups to perfect their mathematical skills, work on their assignments, understand mathematical concepts and study for their exams. This service is free to all Bishop's University students and no appointment is necessary. For more information, contact Scosha Merovitz at 819-822-9600 ext. 2722.

Theatres

Bishop's Centennial Theatre, built in 1967, contains a charming and efficient main theatre seating 550, a spacious lobby, a vast workshop, a rehearsal room, dressing rooms, a Green Room, and the administrative offices. Equipped to the newest standards since the renovations of 2006, it provides an excellent learning facility as well as a splendid focus for professional artists on tour and the annual large-scale Drama Department production. Students are offered every chance to work on the various aspects of the incoming or in-house productions.

The Turner Studio Theatre functions as a dynamic multi-purpose environment for traditional and experimental presentations. Opened in March 1989, it seats up to 150 people in a technically sophisticated yet intimate space which can adapt to the special needs of theatre. As a laboratory and teaching resource, the Studio Theatre provides a creative context in which students can develop their professional skills. The Drama Department produces 2 annual Festivals of student plays as well as four other productions directed by the Drama Department teachers and professors.

University Chapel of St. Mark's

St. Mark's Chapel is the centre of Christian worship for all members of the university community, and is under the ecclesiastical jurisdiction of the Anglican Bishop of Quebec. The Chapel was consecrated in 1857, was enlarged in 1875, and interior additions to the fabric were completed in 1898, when the present magnificent carved oak stalls and panelling were installed. These were executed by French-Canadian craftsmen and are arranged on the pattern of the traditional collegiate church. The other furnishings, stained glass windows, memorial plaques, the organ, the sanctuary lamp, the lectern bible, all reveal parts of the University history. In 1989, the Chapel was declared an historic site by the Quebec Ministry of Cultural Affairs.

Sunday and weekday services are held regularly in the Chapel during term and the Chapel is open daily from 8:00 a.m. to 5:00 p.m. for prayer and meditation. The Sunday service is at 10:00 a.m. and Morning Prayer is held each weekday at 8:15 a.m. Mid-day services, special services with visiting choirs and recitals are held at various times and are publicized throughout the University and the local community. The administration of St. Mark's and its services of worship are the responsibility of the Campus Minister.

The University Centre

The University Centre is the heart of student activity on campus and is comprised of three adjoining buildings: Bishop Mountain House, Memorial House, and Marjorie Donald House.

Bishop Mountain House houses both Bishop's University and Champlain Regional College student government offices, the Diversity and Equity Centre, the Campus newspaper and various club offices. Doolittle's, situated on the first floor near the student mailboxes and campus post office, is a student-owned and operated "dépanneur" (convenience store) where newspapers, snacks and bus tickets may be purchased and where videos may be rented. Tim Horton's, located on the second floor, is well-equipped with floor to ceiling windows and a breath-taking view of the campus.

Memorial House contains the Gaiter Grill while the newly renovated student bar, 'The Gait', also serves as a multi-purpose reception room and examination hall. The International Centre overlooks an outdoor patio.

Marjorie Donald House is the home of the University Bookstore and Pro Shop, both operated by Follett of Canada. On the second floor are found the offices of the Dean of Students Affairs, the Counselling Services, the Employment Resource Centre, the Campus Ministry, and a special needs lab and exam centre.

A spacious atrium connects the three buildings and provides an open and comprehensive space for informal gatherings, promotional tables and various sales of plants, posters, jewelry, and clothing. All facilities are wheel-chair accessible.

Writing Centre

The Bishop's University Writing Centre is located in Divinity House. The Writing Centre's Consultation Service offers free appointments for students who would like help with their written assignments, and free Workshops to help students improve their written work. For further information, contact the Coordinator, Writing Centre, Divinity House. Tel: 819-822-9600, ext. 2400.



Scholarships, Loans, Bursaries and Awards

Scholarship Program

Historically, most of the scholarships awarded under the Bishop's University Scholarship Program were established by gifts from individual or corporate benefactors, some made over 150 years ago. The Bishop's University Foundation has provided the funds necessary to raise these scholarships to amounts more in keeping with the needs of present day students, as well as funding new scholarships to keep pace with the growth of the scholarship program as a whole. The University is grateful to the many donors who support our scholarship program.

Entrance Scholarships

No formal application is required for most entrance scholarships: all applications for admission from CEGEP and high school students received by the March 1 deadline are eligible for scholarship consideration. Applicants after March 1st are considered on an individual basis and are not eligible for Dean's Scholarships.

Decisions on entrance scholarship awards are normally made following receipt of a student's final results to the end of the Fall semester in their final academic year. Students who do not qualify for a scholarship award based on their Fall results will be re-evaluated on receipt of their final transcript for the academic year.

Students are informed of scholarships in their initial letter of admission.

Applicants from Canadian, grade 12, high schools are guaranteed

\$1000 -per academic year with 80 to 84% averages; 82 to 84% for applicants to Educational Studies

\$2000 per academic year with 85 to 89% averages

\$3000 per academic year with averages of 90% and higher

Applicants from the Quebec CEGEP system are guaranteed

\$2000 per academic year with an R-Score between 28-31.9

\$3000 per academic year with an R-Score greater than 32

Students are also informed in the award portion of their admission letter that they must:

1. maintain the required average on their final transcript to confirm their scholarship award. Should that average not be achieved, the scholarship will be reduced to the appropriate value or forfeited.
2. successfully complete the required level of studies (Gr.XII Diploma, OSSD with at least 6 U/M level courses, or DEC) before they register for their first semester at Bishop's. Should their studies not be completed, the scholarship is forfeited.
3. accept the offer of admission/scholarship by early May by paying the \$100 confirmation fee (which is refundable until late June).

There are also a number of Dean's Scholarships (\$4000 per academic year) available each year. Application forms are enclosed with the admission package of all applicants granted \$3000 scholarships, and must be returned with required documentation by May

1st. Dean's Scholarships, when awarded, replace the earlier \$3000 award.

All entrance scholarships are renewable for either three or four years in the completion of a Bishop's program as indicated in the student's confirmation of admission or confirmation of the student's last program change in the completion of their Bishop's degree. Conditions for renewal are listed below.

Second/Third Year Scholarships:

No formal application is required: all students who do not already hold a Bishop's scholarship are considered.

In order to be eligible for a scholarship, a student must:

1. have completed a minimum of 30 credits in the previous September through April academic year at Bishop's with an academic average of at least 80.0% calculated on their best 30 credits completed (including lab credits).

Exception: students participating in an internship, co-op placement, or practicum will have their file evaluated by the ASAP Committee.

2. be registered in their first undergraduate degree.

Exception: A student may make a written request to the ASAP Committee via the Admissions Office for their scholarship eligibility to be extended to their second degree. A one year scholarship at 50% of the normal value could be approved at the discretion of the ASAP Committee.

3. Have at least 12 credits remaining to be completed in their minimum credit requirements for their degree as indicated in their admission letter or latest program change.

Exception: A student may make a written request to the ASAP Committee via the Admissions Office for their scholarship eligibility to be extended to a fourth year for students in a three year program or a fifth year in a four year program. A scholarship for an additional year at 50% of the normal value could be approved at the discretion of the ASAP Committee.

Students who complete the academic year fulfilling the above conditions will be eligible for consideration for a scholarship for the following academic year. The value of these awards may vary from year to year. Scholarships, if awarded, will be renewable for the remainder of the student's program ("program" is defined as the minimum credit requirements for a student's degree as indicated in their admission letter or latest program change) if the scholarship renewal regulations are met.

As many as six larger scholarships may also be available in each academic year, which would replace any lesser Bishop's scholarship if awarded. No application is necessary, as these scholarships are awarded to the most outstanding non-graduating students in the University.

Students are notified of scholarship awards in mid to late May.

Payment of a scholarship in each academic year

1. Scholarship awards are credited to a student's Bishop's account in two equal installments, one at the beginning of each of the Fall and Winter semesters. If the value of the scholarship exceeds the amount charged to the student account for that semester, the balance of that semester's payment is paid to the student.

N.B. Includes students on a recognized Bishop's University exchange program.

2. Scholarship students must be registered at Bishop's on a full-time basis (minimum 12 credits) in each semester in order to be eligible for their award.

Exceptions:

- a. Students in their final semester who require fewer than 12 credits to graduate may petition the Registrar to retain their full-time status, and receive a pro-rated payment.
 - b. Students on a recognized Bishop's University Exchange program.
3. Scholarship students must complete their Fall semester studies at Bishop's with an average of 70.0% in order to be eligible for the Winter installment of their award. Should the student's average fall below 70.0%, their scholarship is lost effective that January semester.

Conditions for renewal of a scholarship for the following year:

A student on scholarship:

1. must complete a minimum of 30 credits (including lab credits) in each September through April (Fall/Winter) academic year with averages as indicated on the website to have their scholarship renewed at the value indicated below for the following year.

Courses completed in the Spring or Summer School cannot be included in the calculation.

Exception: A student on a recognized Bishop's Exchange must complete a 30 credit (or equivalent, as determined by the Divisional Dean) course load at the exchange institution with a first class average for scholarships with a total value under \$3000 or with an average equivalent to 85% for scholarship awards with a total value of \$3000 or more.

Students who lose a larger scholarship because their average falls below 85.0% will receive an appropriate lesser scholarship should they qualify.

Scholarship students who wish to reduce their course load below 30 credits must obtain the written permission of the ASAP Committee in advance of making their course registration. Requests should be submitted through the Admissions Office.

2. may not have less than 12 credits remaining to complete towards their minimum credit program requirements specified in the student's letter of admission (or the last letter confirming a program change) when scholarship renewal decisions are made.

Exception:

A student may make a written request to the ASAP Committee via the Admissions Office for their scholarship eligibility to be extended to a fourth year for students in a three year program or a fifth year in a four year program. Extension of the scholarship for an additional year at 50% of its value could be approved at the discretion of the ASAP Committee.

General information:

1. Scholarship students must successfully complete the requirements of the Writing Proficiency program in their first year at Bishop's, or forfeit their scholarship. The Writing Proficiency Test credit for EWP 099 cannot be included in the 30 credit minimum required for scholarship students. The course EWP 099 is included in the credit count and in the average.
2. Non-credit English as a Second Language courses cannot be included in the 30 credit minimum required for scholarship students, nor in the calculation of the student's academic average, unless the student is formally enrolled in the full-time Certificate in Intensive English as a Second Language (CONELI) program.

Major Entrance Scholarships

Value: \$4000 per year, renewable

ALAN and DOROTHY WILLIAMS SCHOLARSHIP IN BUSINESS

(established by David A. Williams '63, DCL 1996, in memory of his parents)

Awarded on academic standing to the top student entering the Business program.

STANLEY MILLS SCHOLARSHIP IN HUMANITIES

(established in 1995 by the G.H. Stanley Mills Memorial Trust in memory of G.H.S. Mills '43, benefactor)

Awarded on academic standing to the top student entering the Division of Humanities.

BISHOP'S MEMORIAL FUND SCHOLARSHIP

(founded in 1990 to commemorate former students, faculty, administration and friends of Bishop's University)

Awarded to a female student entering a B.Sc. program, preference given to a Quebec student.

DEAN'S SCHOLARSHIPS

(established 2002, funded by the Foundation of Bishop's University)

Awarded to outstanding applicants based on academic standing and evaluation of the student's dossier.

Other Entrance Scholarships

Value: from \$1000 to \$3000 per year, renewable

More than one of each scholarship may be available in any year.

ALUMNAE

(provided by the Bishop's Alumnae Fund).

Preference given to relatives of Bishop's graduates.

ALUMNI

(provided by the Bishop's Alumni Fund).

Preference given to relatives of Bishop's graduates.

ALUMNI JUBILEE

(provided by the Bishop's Alumni Association, in honour of those who graduated more than 50 years ago).

Preference given to relatives of Bishop's graduates.

BANQUE NATIONALE

(endowed through the Partners in Learning Campaign, 1998-2003)

SIR EDWARD BEATTY MEMORIAL

(founded by a bequest in the Will of Sir Edward Beatty DCL '27)

HARRY BENNETT

(endowed through a bequest in the Will of Harry Bennett, who served on the Bishop's Corporation from 1976 -1985, and on the Bishop's Foundation from 1989 - 1997)

BMO FINANCIAL GROUP

(endowed through the Partners in Learning Campaign, 1998-2003)

LA FONDATION J. ARMAND BOMBARDIER

(endowed in 1996 by la Fondation J. Armand Bombardier)

Awarded to an outstanding Quebec student.

BOROUGH OF LENNOXVILLE

(endowed through the Partners in Learning Campaign, 1998-2003)

Awarded to a student who has been a long-time resident of Lennoxville.

CHIEF JUSTICE BOWEN

(founded in 1972 by an anonymous donor in honour of Edward Bowen, DCL 1854, Chancellor 1856-58)

HOWARD BROWN MEMORIAL

(Funded by a bequest in the Will of Howard Brown, DCL 2001, founder of the Department of Music and Professor of Music from 1967-83)

Awarded to an entering student majoring in Music.

ROBERT BRUCE

(founded by a bequest in the Will of Mr. Bruce, a native of Scotland who lived in Quebec from 1835 until his death in 1885)

CANADIAN NATIONAL

(endowed through Partners in Learning Campaign 1998-2003)

ARCHDEACON R.H. COLE

(founded in 1981 with part of a bequest in the Will of the Venerable R.H. Cole)

CORPORATION

(awarded in honour of the Corporation of Bishop's University)

DAVIES CHARITABLE FOUNDATION EASTERN ONTARIO

(endowed in 1996 by the Davies Charitable Foundation in Kingston, Ontario)

Preference given to scholars from the Kingston/Belleville/Brockville area.

IAN DOBELL

(endowed in 2005 by a bequest in the Will of Ian Dobell '74)

EATON

(established by the Eaton Foundation in 1948)

FOUNDATION OF BISHOP'S UNIVERSITY

(funded by the Bishop's University Foundation)

Preference given to students from outside Quebec.

CHIEF JUSTICE GREENSHIELDS MEMORIAL

(founded by a bequest in the Will of Chief Justice Greenshields DCL '31, Chancellor 1932-42)

ELIZABETH GRIFFIN ARTS SCHOLARSHIP

(endowed through a bequest in the Will of Elizabeth Griffin '36)

Awarded annually to entering students in Humanities or Social Sciences.

JOHN HAMILTON

(Chancellor 1900-1926)

HAY FOUNDATION

(funded annually by the Hay Foundation since 1998)

Preference given to a student from Quebec.

HOLT FOUNDATION SCHOLARSHIP

(founded in 1990 by Mrs. Pam Dunn DCL '99 in honour of her father W.R.G. Holt and her grandfather Sir Herbert Holt DCL '29, and her children, four of whom attended Bishop's)

Awarded to an outstanding student entering a Modern Languages program.

HYDRO QUEBEC

Endowed through the Partners in Learning Campaign 1998-2003.

LINCOLNSHIRE FOUNDATION

(funded annually by Eric and Jane '63 Molson since 1994)

Preference will be given to students from Quebec.

LESLIE MCCAIG MEMORIAL

(established anonymously in 2000 in honour of alumnus Leslie McCaig '35 who was killed in active service during WW II)

Awarded to a student entering Humanities who is pursuing a major or honours program in English or History.

MCLEAN BUDDEN SCHOLARSHIP

(funded annually since 2001 by McLean Budden)

J.W. MCCUBBIN IN CHEMISTRY

(established in 2000 to mark the 50th anniversary of the Chemistry Department and to honor one of its founding professors. Dr. J.W.

“Wally” McCubbin came to Bishop's in 1946, was a popular teacher and served as department head several times and later as Dean of Science until his retirement in 1972.)

Awarded to the top entering student in Chemistry or Biochemistry.

S.R. McMORRAN

(established in 1999 by Bud McMorran '60, DCL '04, member of Bishop's Corporation 1989–1997, and Chairman of Bishop's Foundation 1998–)

Preference given to students in the Division of Humanities.

DR. SIDNEY MEDINE

(endowed through a bequest in the Will of Sidney Medine '35)

Multiple scholarships awarded to students of Canadian citizenship who demonstrate academic excellence.

MELOCHE MONNEX

(funded annually since 1994, as an affinity partner of the Alumni Association)

RODNEY S. MILLS

(endowed by Rod Mills '53 through the Partners in Learning Campaign 1998–2003)

Preference given to students in the Williams School of Business who plan to add an international focus to their studies.

JOHN H. MOLSON

(founded in 1972 by John H. Molson DCL '48, Honorary President of the Corporation of Bishop's University)

THE MOLSON FOUNDATION

(endowed through the Partners in Learning Campaign, 1998–2003)

DONALD MONTGOMERY SCHOLARSHIP

(funded annually since 2002 by Don Montgomery '75)

Preference given to a long time resident of Lennoxville.

NORAH MOORHEAD MEMORIAL SCHOLARSHIP

(established by David Jones '76 in honour of Norah Moorhead DCL '86, who devoted her life to the service of education, the Anglican Church, and projects in developing countries)

Preference given to a student from Richmond, QC or elsewhere in the Eastern Townships who is pursuing a Bachelor of Arts, major in English or History.

JASPER NICOLLS EASTERN TOWNSHIPS

(established by a bequest in the Will of A.D. Nicolls, in memory of his father Jasper, the first Principal of Bishop's University)

Preference given to a student from the Eastern Townships.

O.H. DE SÉVIGNÉ SCHOLARSHIP in the CREATIVE and PERFORMING ARTS

(endowed in 1992 by Oscar H. de Sévigné '37)

Awarded to a student entering the Drama, Fine Arts or Music Departments with a first class academic average and high quality creative or performance skills.

POWER CORPORATION

(endowed through Partners in Learning Campaign 1998–2003)

QUÉBÉCOR INC.

(endowed through Partners in Learning Campaign 1998–2003)

SCOTIABANK

(endowed through Partners in Learning Campaign 1998–2003)

FRANK R. SCOTT SCHOLARSHIP

(established in 1985 by alumni in memory of Frank R. Scott '19, DCL '70, constitutional lawyer, poet and humanist)

H. GREVILLE SMITH MEMORIAL

(founded in 1976 with a bequest in the Will of H. Greville Smith DCL '67)

Preference given to students in Natural Sciences.

SUSAN SHARP MEMORIAL

(founded in 1962 by Mr. W.O. Sharp and Miss Helen Sharp in memory of a former Bishop's student)

CITY OF SHERBROOKE

(endowed in 1993 in honour of the University's 150th Anniversary)

Preference given to a student from Sherbrooke.

UNIVERSITY ADMISSIONS

(funded by the Bishop's University Foundation)

Preference given to Quebec students.

VAN HORN MEMORIAL

(founded in 1991 by Aleda Van Horn and friends in memory of her husband William '42, a member of the Bishop's Chemistry Department 1959–86)

Awarded to a student entering Chemistry or Biochemistry.

WALKER

(founded in 1884 by Miss Helen Walker in memory of her parents, Margaret and The Honourable William Walker DCL 1856, Chancellor 1853–56)

WATERVILLE TG INC.

(endowed through the Partners in Learning Campaign, 1998–2002)

Preference given to a Business student from Waterville or the Eastern Townships.

ERIC T. WEBSTER FOUNDATION

(endowed in 2004 through a bequest from Eric T. Webster, friend of Bishop's and father of Norman '62, William '67 and Maggie, stepfather of Mark Armitage '69)

Preference given to a student from the Eastern Townships or Montreal.

HUBERT GRAY WELSFORD

(founded in 1969 by a bequest in the Will of Hubert Welsford DCL '66)

Major Upper Year Scholarships

Value: \$4000 per year, renewable, unless otherwise indicated

These scholarships are awarded on a rotating basis, and may not be available every year.

STANLEY MILLS SCHOLARSHIP IN HUMANITIES

(established in 1995 by the G.H. Stanley Mills Memorial Trust in memory of G.H.S. Mills '43, benefactor)

Awarded to the most improved Humanities student entering their second year.

STANLEY MILLS SCHOLARSHIP IN HUMANITIES

(established in 1995 by the G.H. Stanley Mills Memorial Trust in memory of G.H.S. Mills '43, benefactor)

Awarded to the top Humanities student entering their third or final year.

ALAN AND DOROTHY WILLIAMS SCHOLARSHIP IN BUSINESS

(established by David A. Williams '63, DCL '96, in memory of his parents)

Awarded to the most improved Business student entering their second year.

ALAN AND DOROTHY WILLIAMS SCHOLARSHIP IN BUSINESS

(established by David A. Williams '63, DCL '96, in memory of his parents)

Awarded to the top Business student entering their third or final year.

Other Upper Year Scholarships

ANDREA AND CHARLES BRONFMAN

(endowed through the Partners in Learning Campaign 1998-2003)

Value: \$1,000

Awarded to a student in Canadian Studies. Preference given to a student who explores the Canadian parliamentary system, perhaps through a tour to Ottawa. Selected by the members of the Political Studies Department.

NORMAND CARPENTIER/CAMOPLAST

(established in 1994 by Camoplast Inc. of Sherbrooke)

Value: \$1,000, normally one year only

Awarded to a student entering final year of a BBA or BA Business program who has high academic standing and an interest in Total Quality Management, is a Canadian citizen, and who demonstrates financial need but does not hold other bursaries. Selected by the program.

CAPTAIN MELVILLE GREENSHIELDS MEMORIAL SCHOLARSHIP

(established in 1976 and funded annually by the Captain Melville Greenshields Foundation)

Value: \$5,000 per year

HOLT FOUNDATION SCHOLARSHIP IN MODERN LANGUAGES

(founded in 1990 by Mrs. Pam Dunn DCL '99, in honour of her father and her grandfather, Sir Herbert Holt DCL '29, and by her children, four of whom attended Bishop's)

Value: \$2,000, renewable

Awarded to the top student in a Modern Languages program.

KRUGER INC. SCHOLARSHIP IN GEOGRAPHY

(established in 1994 by Kruger Inc.)

Value: \$1,000, normally one year only

Awarded to a student in the second or third year of a major or honours program in Geography who has achieved high academic standing and who is not already a scholarship holder. Selected by the Department.

SIR HERBERT MEREDITH MARLER MEMORIAL

(founded in 1990 by members of the Marler family, in honour of Sir Herbert Marler DCL '38)

Value: \$1,000, normally one year only

Awarded to a student of high academic standing in a major or honours program in Political Studies who is entering the penultimate year of undergraduate studies. Selected by the Department.

M. GEORGINA MILLS

(established in 1986 by G.H. Stanley Mills in memory of his mother, a Montreal pianist)

Value: \$1,000, normally one year only

Full-time student finishing first year with an average over 70% enrolled in the Music program.

Awarded by audition by the Department.

FRANCES CROOK MORRISON

(established in 1999 by Frances Morrison '39, to recognize the 60th year since her graduation)

Value: \$800; non-renewable

Awarded to a student in the Bachelor of Education year who has achieved a cumulative average of 80% or higher, plans to teach at the elementary school level, and shows commitment to the teaching of Mathematics.

Selected by the School of Education.

ANTHONY W. PRESTON MEMORIAL

(endowed by alumni and friends in honour of Dr. Preston, who taught Classics from 1930-1964, was appointed Vice-Principal in 1964, and was Principal and Vice-Chancellor 1969-70)

Value: \$1,000, normally one year only

Awarded to the honours or major student with the highest academic average entering the second or third year of study in Classics, Philosophy or Religion, who is not holding any other scholarship. Selected by the Chairs of the three Departments.

E.A. PRINCE MEMORIAL

(endowed by former students, colleagues and friends of Professor E.A. Prince, a member of the Bishop's Political Studies Department from 1967-1981)

Value: \$1,000, normally one year only

Awarded to a third year Political Studies student of high academic standing who, in the opinion of the Department, has made a significant contribution to the life of the University. Selected by the Department.

P.H. AND EULAH REED SCOWEN SCHOLARSHIP IN EDUCATION

(established in 1994 by the Scowen grandchildren)

Value: \$2,000, one year only

Awarded to a student entering the Bachelor in Education degree, whose full-time schooling has been interrupted for a minimum of four years, and who demonstrates financial need. Selected by the Department.

WANDA ROZYSKA SCHOLARSHIP IN FINE ARTS

(established in 2007 by Wanda and Stanley Rozynski, who believe that life would not be possible without art)

Value: \$3,000, renewable

Preference will be given to a female, returning student in Fine Arts who has shown the aptitude and desire necessary to pursue a Studio Honours Degree. The recipient will be selected by the faculty of the Fine Arts Department.

SPG JUBILEE ORGAN SCHOLARSHIP

Value: up to \$1,500 per annum, depending upon experience and ability

Awarded to a student organist in return for playing the St. Mark's Chapel organ for university services during term as well as directing a chapel choir. Application may be made through the Awards Office and arrangements will be made to audition the candidate.

STEPHEN ST.CLAIR MEMORIAL SCHOLARSHIP

(established in 1966 by the St.Clair Foundation in memory of a former Bishop's student)

Value: \$3,000 per year

GEORGE H. TOMLINSON MEMORIAL

(established in 1959 under the Will of Mr. Tomlinson DCL '46, a member of the Corporation of Bishop's University 1945-1958.)

Value: \$2,000, normally one year only.

Awarded to an honours Science student, preferably entering third year.

Selected by the Division.

THE TOMLINSON GRADUATE STUDIES SCHOLARSHIPS

(funded since 2008 as a result of a gift from Richard Tomlinson '43, DCL '89)

Value: multiple scholarships valued at \$2,000 for one year only.

Awarded to full-time students pursuing graduate studies at Bishop's University.

General Named Scholarships

ABITIBI CONSOLIDATED

(Endowed through the Partner in Learning Campaign 1998-2003)

Preference given to a student in Social Sciences.

AMERICAN BILTRITE COMPANY

Preference given to a student from Sherbrooke.

BANQUE NATIONALE

(endowed through the Partners in Learning Campaign, 1998-2003)

DR. E.E. BOOTHROYD

(founded by an anonymous alumnus in memory of Dr. Boothroyd who taught English and History at Bishop's from 1904 to 1944)

Preference given to a student in the Humanities.

CHIEF JUSTICE BOWEN

(Chancellor 1856-58)

Value: \$2,000

ROBIN BURNS

(endowed in 2003 by faculty and friends of Robin Burns, who taught History at Bishop's from 1979 until his premature death in 1998)

Preference given to a student in History.

LE GROUPE CANAM-MANAC

(endowed through the Partners in Learning Campaign 1998-2003)

Preference given to students from Quebec.

DOUGLAS CARMICHAEL MEMORIAL

(founded in 1942 by his parents in memory of Douglas Carmichael '38, who was killed in active service during WW II)

JOHN C. CLARK

(endowed through the Partners in Learning Campaign, 1998-2003, in honour of his son Paul '89)

ROSS CLARKSON

(founded in 1969 by an anonymous donor)

CLARK-KENNEDY

(founded in 1959 by Mrs. Clark-Kennedy)

CLASSES OF '59, '60 & '61

(endowed in 2000 in honour of the Bishops' professors and classmates of '59, '60 & '61 and to celebrate the 40th anniversary)

JOHN & PATTIE CLEGHORN

(endowed through the Partners in Learning Campaign in 2000. Chairman of Leadership Gifts and National Chairman of Learning for Life 1987-1992, John received an honorary degree in 1989. Two of their three children, Andrea and Ian, graduated in 1990 and 1991 respectively. Lynne Bridgman '89 joined the family by marrying Ian.)

Awarded to students who are pursuing majors in the programs of Canadian History and/or Fine Arts.

STUART A. COBBETT

(established in memory of a devoted friend and member of the Corporation 1967-76)

COMPASS GROUP CANADA

(endowed through the Partners in Learning Campaign 1998-2003)

CONSTRUCTION LONGER

(endowed in 1998 through the Partners in Learning Campaign)

Preference given to a student from the Eastern Townships.

JEAN CRÉPEAU

(endowed by Jean Crépeau through the Partners in Learning Campaign 1998-2003)

KENNETH CRAWFORD

(established in 2003 through a bequest in the Will of Kenneth Crawford '31)

NANCY DAWES

(founded in 1962 by Nancy Dawes)

ETFS

(endowed through the Partners in Learning Campaign 1998-2003)

Preference given to a scholar from the Eastern Townships.

HARRIET J. EVANS

(founded in 1969 by Harriet Evans, a Sherbrooke resident and Bishop's benefactor)

NARCISSA FARRAND

(founded in 1917 by Mr. & Mrs. H.V. Truell)

FLORENCE MAY FOREMAN

(endowed in 2003 through the Estate of Florence Foreman)

FOUNDATION OF BISHOP'S UNIVERSITY

(funded by the Bishop's University Foundation)

LA SOCIÉTÉ DE CONSTRUCTION GÉRATEK LTÉE

(endowed through the Partners in Learning Campaign 1998-2003)

Preference given to a scholar from the Eastern Townships.

JOHN HACKETT MEMORIAL

(established by friends and family in memory of long time friend, graduate and counsel of Bishop's University, John Hackett '63, who died prematurely in 1999)

Preference given to a Humanities student.

R.W. HENEKER

(Chancellor 1878-1900)

FREDA HOWIE

(endowed in 2003 through the Estate of Freda Howie '39)

MARION REED KERR

(endowed in 2003 through the Estate of Marion Kerr)

Preference given to a student from Ulverton-Richmond-Melbourne.

GENE H. KRUGER SCHOLARSHIP

(founded in 1999 by Joseph Kruger II, Chairman and CEO of Kruger Inc.)

Preference given to an Eastern Townships student.

KILLAM SCHOLARSHIP

(Endowed anonymously to encourage American students to attend Canadian universities)

Value: \$1000

Awarded to students enrolled full-time at Bishop's who are domiciled in or are citizens of the United States. The scholarship is renewable provided students continue to meet the academic standards.

SNC LAVALIN

(endowed through the Partners in Learning Campaign, 1998-2003)

R.A. LINDSAY

(founded in 1947 by Dr. & Mrs. Lionel Lindsay in memory of their son, Class of 1942, who was killed in action in WW II)

W. LONG

(founded in 1872 by a bequest in the Will of the Rev. W. Long)

GERALD MALLARD MEMORIAL

(established in 1985 by Mrs Gertrude Mallard in memory of her husband Gerald '47)

HARRISON McCAIN

(endowed through the Partners in Learning Campaign, 1998-2003)

Preference given to a student from New Brunswick.

MCDONALD'S RESTAURANTS OF CANADA

(endowed through the Partners in Learning Campaign, 1998-2003)

MELOCHE MONNEX

(endowed through the Partners in Learning Campaign 1998-2003)

METRO-RICHELIEU

(endowed through the Partners in Learning Campaign, 1998-2003)

Preference given to Quebec students.

J. RAYMOND MILLS

(established in 2002 through a bequest in the Will of Raymond Mills)

G.H. MONTGOMERY MEMORIAL

(founded in 1951 by a bequest in the Will of Dr. Montgomery, Chancellor 1942-1950)

GARY MULLINS

(established in 2002 by Janyne M. Hodder, Principal & Vice-Chancellor 1995-2004, as a Christmas gift in honour of her husband.)

Preference given to second-year new scholars in English major or honours, who demonstrate financial need. Recipients to be selected by the faculty of the English Department.

SENATOR NORMAN PATERSON FOUNDATION

(endowed in 1993 in honour of the University's 150th Anniversary)

Preference given to a student from Northern Ontario or Manitoba.

PRICE

(founded in 1968 in honour of Brig. Gen. John H. Price DCL '62, Chancellor 1968-74)

PRICEWATERHOUSECOOPERS

(endowed through the Partners in Learning Campaign 1998-2003)

GORDON SAMSON

(endowed through a bequest in the Will of Gordon Samson '42)

VILLE DE SHERBROOKE ARRONDISSEMENT NO 2

(Fleurimont until 2002. Endowed through the Partners in Learning Campaign, 1998-2003).

Preference given to a student of Sherbrooke QC.

JEAN McCALLUM SIMPSON

(established by a bequest in the Will of Jean Simpson '43, and gifts from her brother John McCallum '35.)

Preference given to a student in Mathematics.

H. GREVILLE SMITH MEMORIAL

(founded in 1976 with a bequest in the Will of H. Greville Smith DCL '67)

Preference given to students in Natural Sciences.

STEARNS FAMILY

(endowed by Evelyn Stearns Murphy '53 and her brother David '52 in honour of George M. Sr. and George M. Jr. Stearns)

Preference given to a Humanities student from the Eastern Townships.

LE GROUPE TEKNIKA

(endowed through the Partners in Learning Campaign 1998-2003)

RICHARD TOMLINSON

(endowed in 1999 by Richard Tomlinson '43, DCL '89)

Multiple scholarships awarded to students who demonstrate academic excellence.

O.B. THORNTON

(founded in 1960 by an anonymous donor)

E.W. JOHN TURCKE

(Endowed by his family in memory of John Turcke. Three of his grandchildren – Christina, Peter and Natasha – graduated from Bishop's in 1991, 1994 and 1998 respectively.)

Value: \$500

Preference will be given to an incoming student majoring in Music who demonstrates a high level of proficiency on the violin or cello, and who possesses a high academic standing. This scholarship will be awarded following a successful audition into the Music program.

WILLIAM AND NANCY TURNER

(established in 1988 by William I.M. Turner Jr. DCL '87, Chancellor 1987-95)

GEORGE WESTON IN HUMANITIES

(endowed by the Weston Foundation in 1995 in support of higher education)

J.K. & E.J. WILSON

(established in 1966 by a bequest from Mrs. Joseph C. Kearney)

DENNIS WOOD

(endowed through the Partners in Learning Campaign 1998-2003 by Townships businessman and friend of the University)

JEAN YOUNG

(endowed in 2003 through the Estate of Mildred Young in memory of her daughter Jean '60)

Awards

All are normally one year only, unless otherwise indicated.

1964 GAITER FOOTBALL ATHLETIC AWARD

(established in 2006 by members of the 1964 Championship Team)

Value: \$1,800

Awarded annually to an entering football student-athlete who has demonstrated good performance.

1998 CHAMPIONSHIP TEAM AWARD

(funded annually since 2008 by members of the 1998 Championship Team)

Value: \$2,750 each

Awarded annually to a men's basketball player from Quebec.

APEX

(Awards for Peer Leadership Excellence)

Value: \$1,000 each

Designed to recognize and support outstanding leadership activities by pre-University level students. Awarded by the Awards & Bursaries Committee.

DR. ROBERT M. BROWN CHEMISTRY AWARD

(established in 2008 through a bequest in the Will of Dr. Robert M. Brown '44)

Value: \$1,000

Awarded annually by the Department of Chemistry to a continuing full-time Chemistry student who has maintained good academic standing in a Chemistry program, does not hold another scholarship or award and has demonstrated financial need. This award may be renewable, at the discretion of the Department of Chemistry.

BYL AWARD FOR STUDENT LEADERSHIP

(funded annually since 2006 by Sven Byl '01 and Laura '00 (Parker) Byl)

Value: \$1,000, awarded biennially

Preference will be given to an entering student in good academic standing who demonstrates extensive school involvement and the leadership qualities necessary to become an active participant in the Bishop's Experience.

JEFF CANNON MEMORIAL ENTRANCE AWARD

Value: \$1,000 awarded to each of four Entering students

Preference will be given to students who demonstrate extensive school and community involvement; exhibit leadership qualities; show an entrepreneurial spirit. Awarded by the Awards and Bursaries Committee.

JEFF CANNON MEMORIAL AWARD

(established in 1992 by family and friends in memory of Jeff Cannon '89)

Presented to the graduating student who, in the opinion of his/her peers and the faculty, has contributed significantly to University life and exhibits characteristics and accomplishments similar to those of Jeff Cannon.

OWEN CARTER AWARD

(endowed through the Partners in Learning Campaign 1998-2003 by Owen Carter '38)

Value: \$2,000 total

Awarded to one or more full-time undergraduate students who indicate financial need and have demonstrated both athletic prowess and academic achievements.

CLEGHORN FAMILY AWARD

(endowed through the Partners in Learning Campaign 1998-2003, by John Cleghorn, DCL '89, member of Corporation 1987-1996, Chairman of Learning for Life Campaign 1987-1992, and his wife Pattie.)

Value: \$1,000 each

Awarded to an entering student with an average of 80% or higher, who has demonstrated athletic excellence and to two continuing students who have demonstrated outstanding performance in their sport. Chosen by the Athletic Awards Committee.

WALLY DENVER AWARD

(endowed through the Partners in Learning Campaign, 1998-2003, for the Denver family: Wally '61 and his children Keith '88, Jennifer '91, and Kim '92)

Awarded to a student-athlete in financial need.

Value: \$1,000.

JAMES ETCHEVERRY AWARD

(endowed)

Value: \$500

Awarded annually to a Gaiter football player who has demonstrated athletic excellence.

PAUL F. FENTON AWARD

Value: \$20,000 per year, renewable.

Awarded to an entering student from the Cayman Islands. Preference will be given to a student who is pursuing a major in Business. Consideration will be given to the financial ability of the student to pay International student fees. The award is renewable for the duration of the student's studies, to a maximum of four years, subject to the student maintaining an average of at least 75%.

GAITER CLASSIC AWARD

(funded annually through the Gaiter Classic Golf Tournament)

Value: Multiple awards to be determined annually

Awarded annually to student-athletes who demonstrate athletic excellence. Awarded by the Athletics Awards Committee.

ROBERT J. GOLDBERGER AWARD

(founded in 1999 by Robert J. Goldberger '79)

Value: Multiple awards to be determined annually up to \$7,000 per year

For students who have demonstrated athletic excellence. Awarded by the Athletics Awards Committee.

GRIFFIN FAMILY AWARD

(endowed through the Partners in Learning Campaign 1998-2003 by members of the Griffin family)

Value: multiple awards up to \$1,500 each

Awarded to full-time undergraduate students who demonstrate financial need, academic ability, and the qualities of well-rounded individuals.

PAUL GRATIAS AWARD

(endowed with a gift from Paul Gratias '67 to the Partners in Learning Campaign (1998-2003))

Value: \$2,000

Preference will be given to a student-athlete who demonstrates financial need. The award is renewable provided the recipient remains in good academic standing.

PAUL HAWCO MEMORIAL AWARD

(established in 1996 in memory of Paul Hawco '95)

Value: \$1,500

Awarded to an entering student from the province of Alberta who has demonstrated high academic standing, participation in extra-curricular activities, fine citizenship and a sense of humour. Information available from the Admissions Office.

HOWARD HOLLOWAY AWARD IN EDUCATION

(established in memory of Howie, Class of '65, by friends and family)

Value: \$1000

Offered to students who have a high academic standing, possess past or present leadership or character suitable to teaching (e.g. contribution to educational endeavours at the University or in the community), and demonstrate financial need.

JEAN ROBINSON HUNT MEMORIAL AWARD

(established in 2000 by Ross Hunt '81, in memory of his mother, Jean Robinson Hunt)

Value: \$7,500 per year, renewable for a total of three years.

Tuition and residence expenses for a Quebec student from outside the Montreal region, who demonstrates financial need, and who maintains an academic average at Bishop's of 70% or better. Application required.

ERIC & CANDACE INNES AWARD

(endowed through the Partners in Learning Campaign by Eric '71 and Candace '71)

Preference given to a student in second year who came to Bishop's from outside the Province of Quebec, who is in good academic standing, and who has made a significant contribution to campus life. To be eligible, the student must submit an essay of 500-600 words on "Objectives for my University Experience" to explain his or her aspirations for university. The award is renewable provided the recipient continues to meet the criteria.

Value: \$2,000

PROF. T.A. JUDSON ROOKIE AWARD IN FOOTBALL

(funded annually by Keith Judson in honour of his father, Andrew, who taught Economics at Bishop's from 1953 to 1989)

Value: \$1,500

The recruitment award is a one time incentive to attract a promising rookie who then stays of his own accord.

KEITH AND FRANCES JUDSON AWARD IN FOOTBALL

(funded annually since 2007 by Keith Judson)

Value: \$2,000

Awarded annually to a football student-athlete who has demonstrated good performance.

RON AND SHELLY KAULBACH AWARD

(endowed through the Partners in Learning Campaign by Ron '66)

Awarded to students who have demonstrated good performance in a sport and are in financial need. Selection made by the Athletic Awards Committee.

Value: two awards of \$1,000 each

IRENE MACKAY AWARD

(established in 1997 by Dr. Hugh M. Scott DCL 1999, Principal & Vice-Chancellor 1986-1995, in honour of his mother)

Value: \$2,500

Preference given to a student from a single-parent household who is in good academic standing and who demonstrates financial need. Information available from the Business Office.

BARRY MCBRIDE BASKETBALL AWARD

(funded annually since 2006 by David '93 and Lisa '98 in honour of their father, a loyal fan of Gaiter Basketball)

Awarded annually to a Gaiter basketball player, in good academic standing who has excelled on the court and demonstrated financial need.

Value: \$1,000

SYDNEY McMORRAN AWARD

(endowed in 2004 by John Donald '60, David Thomson, and Urban Joseph in recognition of their long-standing friendship with Bud McMorran '60, DCL '04, and his father Sydney '29)

Awarded annually to a continuing student-athlete who demonstrates financial need. Recipient chosen by the Athletic Awards Committee.

Value: \$1,000

ZDENEK MUNZAR/1967 OSLAA BASKETBALL CHAMPION AWARD

(endowed since 2008 with \$13,000 from the Zdenek Munzar Trust Fund and \$10,000 donated at the Fall 2007 induction of the Championship Team to the Wall of Distinction)

Value: \$1,000

Awarded by the Athletics Awards Committee to a Gaiter basketball student-athlete.

ZDENEK MUNZAR MEMORIAL AWARDS

Value: multiple awards to be determined annually

Awarded by the Athletics Awards Committee to students who indicate financial need and who have demonstrated athletic prowess in football.

NUEVOS RECUERDOS DE ESPAÑA

(funded annually since 2003 by Dr. Céline Dudemaine)

Value: \$1,000

Awarded annually as a travel grant to a student pursuing a major in Hispanic Studies, who plans to study abroad in Spain for one or two semesters.

NUESTRA AMÉRICA

(funded annually since 2006 by Professor Gilberto D'Escoubet)

Awarded annually as a travel grant to a student pursuing a major in Hispanic Studies, who plans to study in a Spanish American country for one or two semesters.

JEAN IRVINE PATERSON AWARD

(endowed in his mother's honour by Alex K. Paterson '52, DCL '74, member of Corporation 1969-1990, Chancellor 1995-2005)

Value: two awards of \$1,000 each

Awarded to full-time undergraduate students who are not eligible for other entrance awards and who, at the time of admission, are considered to have characteristics which make it likely that they will, on graduation, contribute significantly to the community. Recipients recommended by the APEX Committee.

JOAN AND ALEX PATERSON AWARD

(funded annually by Alex '52, DCL '74 and Joan Paterson)

Awarded annually to the graduating student who, during his or her years at Bishop's, contributes the most to volunteer work and activities in the off campus community.

E. ANTHONY PRICE AWARD

(endowed in 2003 by the family and friends of Tony Price '50, DCL '02)

Value: \$1,000

Awarded annually to an upper year student who has excelled in academics and athletics and whose first language is French.

THOMAS E. PRICE MEMORIAL AWARD

(established in 1997 in memory of Thomas Price '51, DCL '82)

Value: \$1,500

Preference will be given to a student-athlete entering second year, who is academically eligible to participate and has demonstrated outstanding ability in inter-university competition. Selection made by the Athletics Awards Committee.

JOE & YVONNE SCOTT AWARD

(established through Partners in Learning Campaign 1998-2003 to honour the graduation of their daughters, Jennifer '99 and Allison '01. Joe served on Bishop's Corporation from 1990-99.)

Awarded to a student who has demonstrated good performance in a sport and is in financial need. Selection made by the Athletic Awards Committee.

Value: \$1,000 (two awards)

AZIZ TABAH AWARD

Awarded annually to an entering student who demonstrates academic promise, community service and financial need.

Value: \$1,200 (non-renewable)

Bursaries

ALLATT FAMILY AWARD IN RELIGIOUS STUDIES

(introduced by employees of etfs inc. in honour of the owners as a Christmas present in 2000)

Value: \$1,000

Awarded to a student pursuing a major or minor in Religious Studies who is in financial need. Applications/inquiries should be made at the Business Office.

BIRKS FAMILY FOUNDATION BURSARY

(established in 1990)

Value: \$500 - \$1,500

Awarded annually to outstanding undergraduate full-time students who demonstrate financial need. Applications/inquiries should be made to the Student Financial Aid Office.

BISHOP'S UNIVERSITY STAFF BURSARY

(endowed by support staff through the Partners in Learning Campaign 1998-2003)

Value: Varying amounts up to \$2,200 total

Given to returning full-time students in good academic standing who are Canadian citizens, who demonstrate financial need, and who do not hold any other University scholarship or bursary. The recipients will be chosen annually in June by the Awards & Bursary Committee.

CHAWKERS FOUNDATION BURSARY

(endowed in 2000)

Value: \$900

Awarded for one year only to a student in good standing in the Environmental Studies program, who has demonstrated financial need. Recipient selected by the faculty of the Environmental Studies and Geography Department.

COASTALCONTACTS.COM EMERGENCY BURSARY

(established in 2007 by Roger V. Hardy '93, Chairman and CEO of Coastal Contacts)

Value: \$500

Available to full-time students of Bishop's University who demonstrate urgent financial need due to exceptional circumstances.

Applications/inquiries should be made to the Business Office.

VIRGINIA COWAN MEMORIAL BURSARY

(established by family and friends in memory of Virginia Cowan '95, who died prematurely in 2001)

Presented annually to a continuing female student in Business who has demonstrated financial need, participated widely in campus life, and maintained good academic standing.

Value: \$850

STEWART GRAHAM MEMORIAL BURSARY

(established by family, faculty and friends of Stewart Graham '00 on the occasion of his premature death in 2000)

Value: \$200

Preference given to a continuing student from Atlantic Canada who demonstrates financial need.

ROGER V. HARDY BURSARY

(endowed in 2003 by Roger V. Hardy '93)

Preference will be given to a rugby player, male or female, in good academic standing who demonstrates financial need.

Value: \$3,000

JOHN LECKIE BURSARY

(endowed in 2005 by John Leckie '68)

Value: \$500

Preference will be given to a student from the Eastern Townships, pursuing a degree in Business, who demonstrates financial need.

BOROUGH OF LENNOXVILLE BURSARY

(funded since 1994 by the Borough of Lennoxville)

Value: to be determined annually in the fall

Preference will be given to a long-time resident of Lennoxville who is entering first-year and who demonstrates financial need.

MAYA LIGHTBODY BURSARY

(endowed by colleagues and friends of prominent regional artist Maya Lightbody)

Value: \$300

Preference will be given to a student enrolled in Fine Arts courses at the Knowlton Campus who demonstrates financial need.

DR. SIDNEY MEDINE BURSARY

(endowed through a bequest in the Will of Sidney Medine '35)

Awarded to students of Canadian citizenship who demonstrate financial need.

Value: Multiple bursaries in amounts to be determined annually in March.

O'KILL AND BARBARA MILLER MEMORIAL BURSARY

(established in 2008 by Sandra Miller '90 in memory of her parents)

Value: \$1,000

Preference will be given to a full-time, mature student from Quebec who has demonstrated financial need. Application forms will be available on the website or through the Business Office in September. The recipient will be chosen annually by the Awards & Bursary Committee.

STANLEY MILLS BURSARY IN HUMANITIES

(established in 1995 by the G.H. Stanley Mills Memorial Trust in memory of G.H.S. Mills '43)

Value: Up to \$1,500 each

Designed to support Humanities students who are in good academic standing and in financial need, this bursary program provides an annual maximum of \$14,000, which is awarded on the recommendation of a committee of the Division of Humanities. Application forms are available at the office of the Dean.

MONTREAL & OTTAWA ALUMNI & FRIENDS BURSARIES

(funded by alumni and friends who participate in an annual golf tournament)

Awarded annually to students from the Greater Ottawa and Greater Montreal areas who demonstrate financial need. The recipients will be chosen by the Awards & Bursary Committee. Applications should be made through the Business Office.

Value: Multiple bursaries in amounts to be determined annually.

CAROL AND MICHAEL MOONEY INTERNSHIP BURSARY

Awarded annually by the School of Education to an Education student in financial need to assist with travel costs associated with the students' practicum.

Value: \$500

THOMAS E. PRICE BURSARY

(established in 1997 in memory of Thomas Price '51, DCL '82)

Preference will be given to continuing student-athletes who demonstrate financial need.

Value: Up to \$1,000 each

Application forms are available from the Athletics Department.

ALAN AND DOROTHY WILLIAMS BURSARY IN BUSINESS

(established in 1993 by David A. Williams '63, DCL '96, in honour of his parents whose personal sacrifices enabled him to benefit from higher education.)

Designed to support Business students who are in financial need, this bursary program provides an annual maximum of \$30,000 that is distributed in numerous grants to deserving students. Application forms are available from the Williams School of Business.

ST-ANDREW'S SOCIETY BURSARY

Value: \$1,000

Awarded on the recommendation of a committee to a student of Scottish descent who can demonstrate financial need. Application forms are available from the Business Office.

CAROL STEVENSON BURSARY

(Endowed in 2001-02 by Carol Stevenson to encourage and help serious students of any age to pursue higher education)

Value: \$1,000

Preference will be given to a student who demonstrates financial need, has an average of 70% or higher, and who does not hold any other University academic scholarship or award.

TD BANK FINANCIAL GROUP BURSARY

(endowed through the Partners in Learning Campaign 1998-2003)

Value: up to \$1,500 each

Awarded to students resident in Canada who demonstrate financial need.

TORONTO ALUMNI & FRIENDS BURSARIES

(funded by alumni and friends who participate in an annual golf tournament)

Awarded annually to students from the Greater Toronto area who demonstrate financial need. The recipients will be chosen by the Awards and Bursary Committee. Applications should be made through the Business Office.

Value: Multiple bursaries in amounts to be determined annually.

WULFTEC INTERNATIONAL BURSARY

(endowed through the Partners in Learning Campaign 1998-2003)

Value: \$1,800

Preference given to a student in financial need from Ayer's Cliff, Beebe, Stanstead or Rock Island.

Loans

Provincial Loans and Bursaries

Governmental aid is extended to students in the form of guaranteed loans, or a combination of guaranteed loans and bursaries according to the applicant's requirements. The plan is designed to give increased aid to those with greater needs. A student is eligible who:

- is a Canadian citizen;
- is domiciled and has resided in their respective Provinces for at least a year;
- has submitted an application form to the Student Aid Service, in their respective province, by the required date, in which requirements of a financial nature have been established.

Students coming to Bishop's from other Canadian provinces should contact their provincial ministry of education for information about loans and bursaries.

External Scholarships

An extensive list of Graduate scholarships tenable in Canada or internationally is available on the Bishop's Research website at: www.ubishops.ca/research/scholarships.html.

The Association of Universities and Colleges of Canada (AUCC) administers scholarships for Canadian and International students. A list of available undergraduate and graduate scholarships can be accessed on the AUCC website: www.aucc.ca

Natural Sciences and Engineering Research Council of Canada (NSERC) Undergraduate Student Research & Industrial Awards (USRAs) – University undergraduate student research awards provide financial support to undergraduate students. www.nserc-crsng.gc.ca

See the Director of Research Services, Sylvie Côté for information.

Postgraduate Scholarships

Canada-US Fulbright Scholarships

www.fulbright.ca

Canadian students may apply for a Fulbright Scholarship to enter a graduate program at a university in the USA.

NSERC Alexander Graham Bell Graduate Scholarships (\$17,500)

www.nserc-crsng.gc.ca

See the Director of Research Services, Sylvie Côté for application information.

Social Sciences and Humanities Research Council of Canada (SSHRC) J. Armand Bombardier Graduate Scholarships (\$17,500)

www.sshrc-crsh.gc.ca

Bishop's University submits a quota of pre-selected applications by the January 31st deadline each year. See the Vice-Principal's office for application information.

Canadian Institutes of Health Research (CIHR) Graduate Scholarships

www.cihr-irsc.gc.ca

Bishop's University submits a quota of pre-selected applications by the February 1st deadline each year.

See the Vice-Principal's office for application information.

Government of Canada International Scholarships

www.scholarships.gc.ca

Scholarships for graduate study and research offered to Canadians wishing to study abroad.

Fonds de recherche du Québec

Master's and doctoral research scholarship funding available to Quebec residents. Online applications:

Fonds de recherche sur la société et la culture www.fqrsq.gouv.qc.ca

Fonds de recherche en santé du Québec www.frsq.gouv.qc.ca

Fonds de recherche sur la nature et les technologies www.fqrnt.gouv.qc.ca

Prizes

To be eligible for any prize, students must be in an honours or a major program, and must have completed a minimum of 30 credits at Bishop's University. There are two major categories of prizes: University-wide prizes, for which students in any program may compete; and Departmental proficiency prizes, which are awarded for excellence in a particular discipline or program.

To be eligible for a University-wide prize, a student must have a minimum cumulative average of 80% over all courses completed. A graduating student must have completed at least 60 credits at Bishop's University; a non-graduating student must have completed a minimum of 30 credits at Bishop's.

To be eligible for any Departmental prize, a student must have completed at least 30 credits at Bishop's University, and must have a minimum average of 80% in courses in the discipline (or accepted cognate courses).

Where non-academic criteria are included in the specifications for a prize, students with an average not lower than 75% may be considered to be eligible.

No prize may be awarded more than once to the same student.

University-wide Prizes

GOVERNOR GENERAL'S GOLD MEDAL

Awarded for outstanding academic proficiency in a Master's program.

GOVERNOR GENERAL'S SILVER MEDAL

Awarded to the student standing first in the final year of his/her undergraduate program.

CHANCELLOR'S PRIZES

Two awards for outstanding academic proficiency in the final year of an undergraduate course. These two awards cannot be granted in the same Division.

VICE-CHANCELLOR'S PRIZE

Awarded for outstanding academic proficiency in the final year of an undergraduate course.

PRESIDENT'S PRIZES

Two prizes awarded to students in the final year obtaining Class I standing. These two awards cannot be granted in the same Division.

VICE-PRESIDENT'S PRIZE

Awarded to a student in his or her final year for outstanding academic proficiency.

HON. G. HOWARD FERGUSON CUP

The student of the graduating class who has made the greatest contribution to the life of the University is to have his or her name inscribed on a cup presented by the Hon. G. Howard Ferguson, and is to receive a certificate appropriate to such a distinction.

Such an award shall take into consideration:

- (a) high academic standing.
- (b) proficiency in representing the University in athletic and other activities.
- (c) qualities of character and leadership.

CHIEF JUSTICE GREENSHIELDS PRIZE

This prize is awarded to the winner of the Hon. G. Howard Ferguson Memorial Trophy.

STRATHCONA FOUNDATION PLAQUE

Awarded to the athlete of the graduating year with the highest academic standing, who has represented the University in intercollegiate competition.

ROSS HUNTING PRIZE

Awarded to a student in the penultimate year of an undergraduate program who is of proven academic ability and who has contributed to the life of the University through intercollegiate sports and other activities.

COLONEL ARTHUR MILLS PRIZE

Awarded to a first year student with a first class academic standing who has made the most valuable contribution to the extra-curricular life of the University.

CHARLES A. SHEARSON MEMORIAL PRIZE

This prize shall be awarded to a student in neither the first nor final year, with high academic standing, who has made a contribution to the life of the University, representing the University in athletic and other activities and who shows qualities of character and leadership.

STANMIL PRIZE FOR EXCELLENCE IN WRITING

Awarded for excellence in writing. Winner chosen by the English Department.

WEBSTER PRIZE

Awarded to a student graduating in two areas of specialization (e.g. double honours, double major, major and minor, or a double concentration in the B.B.A. Program), with high academic standing, and who has made a significant contribution to University life through participation in athletics or other extracurricular activities.

ALUMNI PRIZES

Awarded to the male student with the highest standing in the first and second year (one prize for each year).

ALUMNAE PRIZES

Awarded to the female student with the highest standing in the first and second year (one prize for each year).

Canadian Federation of University Women Sherbrooke and District "Eileen Healy Prize for Leadership"

Awarded by the Canadian Federation of University Women Sherbrooke and District to a female graduating student with high academic achievement and overall contribution to university life, who intends to continue her studies at the graduate level.

ST. MARK'S CHAPEL PRIZE

Awarded to a student of proven academic ability who, in the opinion of the Friends of St. Mark's, has contributed to the life of the University through significant participation in the community of St. Mark's Chapel. This prize can be awarded only once to any student.

RACHELLE WRATHMALL PRIZE

Awarded to the graduating female student from the Eastern Townships with the highest academic average.

Departmental Proficiency Prizes

In Departments and programs for which no other prizes are specified, a University Prize will normally be awarded to a graduating student with high academic standing; an Undergraduate Prize will be awarded to a non-graduating student.

Biochemistry

SOCIETY OF CHEMICAL INDUSTRY AWARD IN BIO-CHEMISTRY

Awarded to the graduating student with the highest standing in Honours Biochemistry.

Biological Sciences

ARTHUR N. LANGFORD PRIZE

Awarded in the name of Emeritus Professor A.N. Langford to the top graduating student in Biology.

SUSANNA LEE MEMORIAL PRIZE

Awarded in memory of Susanna Lee '97 to a graduating student in Biology who intends to pursue either graduate studies or further education in the allied health sciences.

J.K. LOWTHER PRIZE

Awarded in memory of Professor J.K. Lowther to a graduating student of high academic standing who is judged to show special interest in the field of Ecology.

ARNOLD N. SCHOCH PRIZE

Awarded in memory of Arnold N. Schoch, B.Sc. '40, to an undergraduate in any year but preferably of the first year, for proficiency in Biology, particularly for competence and initiative in laboratory or field studies.

LEO SEPP PRIZE

Awarded in memory of Professor Leo Sepp to a biology student in his or her second program year on the basis of general proficiency.

U-O PRIZE IN BIOLOGY

Awarded to the student in the first year of a 4-year natural Science program with high academic standing in two or more Biology lecture courses and associated laboratory courses.

Business Administration

ERNST & YOUNG AWARD IN ACCOUNTING

(financed annually since 2006 by Ernst & Young and the following Bishop's graduates who work at the firm: Neal Clarence '79; Michelle Dunn '00; Denis Lajoie '91; Peter Lamantia '88; Michel Marleau '91; Gary S. Miller '88; Luc A. Picard '93; Graham J. Robinson '04; William J. Sharp '03)

Value: \$1,000

Awarded to a student going into his/her final year of study who holds the highest average in Accounting courses (minimum of 5) and who is planning to pursue a CA designation.

JOHN B. FELLOWES MEMORIAL PRIZE

Awarded for high proficiency in Business Administration to a student who, in the opinion of the Division, has made a significant contribution to the work of the class.

BRIAN H. FRIPP AWARD

Awarded to a BBA or B.A. Business student who is entering the final year of study, and who has demonstrated vision and ingenuity in entrepreneurship. The recipient will be recommended to the Williams School by the Director of the Dobson-Lagassé Entrepreneurship Centre.

CHARLES KINGSMILL MEMORIAL PRIZE

Awarded for high proficiency in Business Administration to a student in the graduating year who, in the opinion of the Division, has made a significant contribution to the work of the class.

HUGH R. McCUAIG PRIZE IN INVESTMENTS

Awarded to a student graduating with a BBA, concentration Finance, who has registered to write the Level 1 Chartered Financial Analyst examination at the sitting following graduation and whose average is over 75%.

DAVID RITTENHOUSE PRIZE IN ENTREPRENEURSHIP

Funded annually since 2008 by Annis '79 and Steve '84 Karpenko to recognize the important contribution made by David Rittenhouse to entrepreneurial studies at Bishop's.

Value: \$500

The prize will be awarded during the fall semester course BMG 214 to the student group which presents the best business plan. The winning group will be selected by the class.

P.H. SCOWEN MEMORIAL PRIZE IN ENTREPRENEURSHIP

(Established in 1991 in memory of P.H. Scowen, a loyal friend of Bishop's University)

Value: \$500

The prize will be awarded during the winter semester course BMG 214 to the student group which presents the best business plan. The winning group will be selected by the class.

TÉNOR MARKETING PRIZE

Funded annually since 2009 by Richard Dorais '85, President of Ténor Marketing Inc.

Value: \$250

Awarded in January to a full-time student in the Marketing concentration who is entering his/her final semester and who has the highest cumulative average in all courses.

Chemistry

ALBERT KUEHNER MEMORIAL PRIZE

Awarded to a graduating student with high standing in Chemistry.

SOCIETY OF CHEMICAL INDUSTRY AWARD IN CHEMISTRY

Awarded to the graduating student with highest standing in Honours Chemistry.

CHEMISTRY FACULTY PRIZE

A prize donated by the faculty of the Department of Chemistry programs and awarded to the first-year student with the highest standing in Chemistry.

CANADIAN SOCIETY FOR CHEMISTRY SILVER MEDAL

Awarded to the student standing at the top of the penultimate year in an Honours Chemistry program.

CHEMICAL RUBBER CO. ACHIEVEMENT AWARD

Awarded to the Chemistry student with the highest standing in his/her first year.

Classical Studies

PRINCE OF WALES PRIZES

Two prizes are awarded to students obtaining first class standing in courses given in the Department of Classics.

MACKIE PRIZE

Awarded to the graduating student in Classical Studies with the highest standing.

Computer Science

ALBERT KWONG MEMORIAL PRIZE

Awarded to an undergraduate student with high academic standing.

COMPUTER SCIENCE FACULTY APPRECIATION PRIZE

Awarded by the faculty members of the Computer Science Department to a Computer Science student who has made the greatest contribution to the life of the Department.

Continuing Education

COUNCIL OF PART-TIME STUDENTS SESQUICENTENIAL PRIZE IN A DEGREE PROGRAM

Awarded to a part-time student registered in a degree program who has completed a minimum of 60 credits with high academic standing. This prize can be awarded only once to any student. Funding is provided annually by the Council of Part-time Students.

COUNCIL OF PART-TIME STUDENTS SESQUICENTENIAL PRIZE IN A CERTIFICATE PROGRAM

Awarded to a part-time student graduating in a certificate program with a high academic average. Funding is provided annually by the Council of Part-time Students.

Drama

BARD AWARD

Awarded to a continuing Drama student entering the second year of study, who has achieved high academic standing and made a significant contribution to Departmental productions.

MICHAEL C. BOISVERT MEMORIAL PRIZE

Established by his colleagues, friends and family in memory of Michael C. Boisvert, Technical Director of Centennial Theatre from 1987 to 1994. The prize is to be awarded annually to a student neither in first nor final year, with high academic standing, who in the judgment of the Department has demonstrated proficiency in technical theatre production.

EUPHEMIA ROSS PRIZE

Endowed by Professor C.W. Topping in memory of his sister and awarded to a third-year Drama student of proven academic ability.

LENNOXVILLE AND DISTRICT WOMEN'S CENTRE PRIZE

Awarded to a female student completing her first year, who is enrolled in an honours or major program in Drama, and who in the judgment of the Department has demonstrated excellence in the practical aspects of theatre.

JANE QUINTIN MITCHELL AWARD IN DRAMA

(established in 1965 by Dr. and Mrs. T.J. Quintin in memory of their daughter)

Value: \$250

Second or third year student with Dramatic Literature as one of their subjects who has shown talent and interest in some practical aspect of play production in the University theatre. Selected by the Department.

Economics**AWARD FOR EXCELLENCE IN ECONOMIC RESEARCH**

Awarded to the student with an outstanding essay in the area of economic theory. Funded by the Cormier Centre Trust.

ECONOMICS EDUCATION ENHANCEMENT PRIZE

Awarded to the student, in the opinion of the department, who has made significant contributions to the professional and pedagogical development of the Department. Funded by the Department of Economics.

FACULTY PRIZE IN ECONOMICS

Awarded to a returning student with the best performance in first year economic theory; one each in Microeconomic theory and Macroeconomic theory. Funded by the Department of Economics.

JOHN W.Y. SMITH PRIZE

Awarded for high proficiency in Economics.

J. R. STOKES PRIZE IN ECONOMICS

(funded annually since 2007 by J. R. Stokes '58)

Value: \$200

Awarded to a full-time, first-year student in Economics who has completed at least nine required credits in Economics and finished the year with the highest cumulative average.

Education**ALAN W. JONES MEMORIAL PRIZE**

Awarded to the student with the highest academic standing in the Bachelor of Education program.

CHARLES MCBURNEY PRIZE

Endowed by Mrs. Charles McBurney in memory of her husband, and awarded for the highest proficiency in Practice Teaching at the Secondary Level.

QUEBEC PROVINCIAL ASSOCIATION OF TEACHERS PRIZE

A prize given at the discretion of the Director of the School of Education to a student who has shown a genuine professional attitude in his/her year of teacher-training.

WILLIAM L. SHURTLEFF PRIZE FOR PRACTICE TEACHING

Provided by the William L. Shurtleff Fund, and awarded for highest proficiency in Practice Teaching at the Elementary Level.

WILLIAM L. SHURTLEFF PRIZE FOR ACADEMIC ACHIEVEMENT

Provided by the William L. Shurtleff Fund, and awarded to the graduating student attaining the highest academic standing in the B.A. Major in Educational Studies.

JOHN S. VISSER MEMORIAL PRIZE IN EDUCATION AND FRENCH

(established in memory of John S. Visser '42, Dip. Ed. '45)

Awarded to a graduating student in Education and French who, in the opinion of the Departments concerned, has demonstrated excellent French-teaching ability.

English**HONORARY PRESIDENT'S PRIZES**

Two prizes awarded to the students who obtain the highest standing in the U1 and U2 years of an English program.

MACKIE PRIZE

Awarded to the graduating student in honours English with the highest standing.

F.E. MEREDITH MEMORIAL PRIZE

A prize endowed by the late W.C.J. Meredith, Esq., Q.C., M.A., D.C.L., in memory of his father F.E. Meredith, Q.C., L.L.D., D.C.L., who was Chancellor of the University from 1926 to 1932. Awarded to the student graduating in an English program who writes the best English (on recommendation of the Department).

SHAUNA MURRAY MEMORIAL PRIZE

Established in 1994 by her family and friends in memory of Shauna Murray, Professor of English at Bishop's from 1970-1982. To be awarded annually at Convocation to the student chosen by the members of the English Department who submits the best English honours thesis, and who is not otherwise receiving a Departmental award.

ARCHDEACON F.G. SCOTT PRIZE

A prize awarded by his grandson Dr. H.J. Scott for creative writing.

Environmental Studies and Geography**THE CANADIAN ASSOCIATION OF GEOGRAPHERS PRIZE**

Awarded to an outstanding graduating student in the Environmental Studies and Geography honours or major program.

Études françaises et québécoises**LIEUTENANT RODDIE LEMIEUX PRIZE**

Awarded for proficiency in French Literature, in memory of Roddie Lemieux, a student of this University, who was killed during the War of 1914-1918.

AMBASSADOR OF SWITZERLAND PRIZE

Awarded to a student in the final year who obtains a high standing in French.

Fine Arts**BOOK PRIZE IN STUDIO ART**

Awarded to a graduating student who in the opinion of the Department has shown exceptional talent in Studio Art courses.

EDWIN F. ALDER AWARD IN ART HISTORY

Awarded to a graduating student with high academic standing in art historical study.

German Studies

FEDERAL REPUBLIC OF GERMANY PRIZES

Book prizes awarded for proficiency in German by the Montreal Consul General of the Federal Republic of Germany.

REPUBLIC OF AUSTRIA PRIZES

Book prizes awarded for proficiency in German by the Montreal Consul General of Austria.

AMBASSADOR OF SWITZERLAND PRIZE

Awarded to a student in the final year who obtains high standing in German.

History

MALCOLM AND EVELYN DOAK PRIZE IN HISTORY

Given with love and in honour of the 50th wedding anniversary of Malcolm '24 and Evelyn '26 Doak from their family, the prize will be awarded to the undergraduate who presents the best essay on one of four historical topics to be assigned at the beginning of the academic year.

RODERICK THALER MEMORIAL PRIZE

Awarded on recommendation of the History Department to a graduating student in History.

BILL AND CATHERINE YOUNG PRIZE IN HISTORY

Awarded for the best essay submitted for a History course by a first-year student in either a major or an honours History program, upon recommendation of the faculty in the Department.

Hispanic Studies

HISPANIC STUDIES PRIZE

A book prize awarded to a graduating student with high academic standing in a minor in Hispanic Studies.

AMBASSADOR OF SPAIN PRIZE

A book prize awarded to a graduating student obtaining a high standing in a major in Hispanic Studies.

UNAM ESCUELA DE EXTENSION

A book prize awarded to a non-graduating student with high academic standing in either a major or minor in Hispanic Studies.

Italian Studies

AMBASSADOR OF SWITZERLAND PRIZE

Awarded to a student in the final year who obtains a high standing in Italian.

Mathematics

GENERAL NICOLLS PRIZE

Awarded to the graduate attaining the highest standing of the course in Mathematics honours, or the course in Mathematics and Physics honours.

IRVING PRIZE

Awarded to the U1 year student with the highest marks in Mathematics.

Modern Languages

PROFESSOR E.H. YARRILL PRIZE

Awarded to a graduating student for proficiency in French and at least one additional modern language other than English.

Music

HOWARD BROWN PRIZES

Established in 1984 to honour the founding member of the Music Department.

Awarded to continuing full-time Music majors.

FRIENDS OF MUSIC AWARD

Value: \$300

Awarded to the Music Honours or Major student coming second in the competition for the M. Georgina Mills Scholarship.

Philosophy

GEORGE ENGLEBRETSSEN PRIZE IN PHILOSOPHY

(established in 2008 by students, colleagues and friends of Professor George Englebretsen, in recognition of his many contributions to Philosophy and teaching at Bishop's University)

Awarded to a graduating student who has written an outstanding honours thesis and who is going to attend graduate school.

DOUGLAS A.T. LLOYD MEMORIAL PRIZE IN PHILOSOPHY

(established in 2004 in memory of Douglas Lloyd '62 by his wife Nancy Tees '63, and their three children: Stephen '89, Jennifer '92, and Carolyn '96)

For a student who has excelled in Philosophy, enjoyed an enriched educational experience, and contributed to the broader culture on campus. Recommended by members of the Department.

Physics

DAVID SAVAGE PRIZE IN PHYSICS AND MATHEMATICS

(endowed by family and friends in memory of David Savage '42 who had a distinguished career in Quebec teaching and school administration)

Awarded to a graduating student who attains the highest academic standing in completing a double major or a major and minor in Physics and Mathematics.

T.S. NAGPAL PRIZE

Awarded for outstanding academic performance by a U0 student, preferably an international student; selected by the members of the Department.

FACULTY PRIZE IN PHYSICS

For the U1 Physics student with the highest average in his or her Physics and Mathematics courses, based on at least 15 credits.

Political Studies

PROFESSOR T.W.L. MACDERMOT MEMORIAL PRIZE

A prize endowed by former students and colleagues of Professor MacDermot, diplomat, scholar, and founding head of the Department. It is awarded to the graduating student majoring in Political Studies (honours or pass) of high academic standing, who, in the opinion of the Department, has also made a significant contribution to the life of the University.

PROFESSOR E.A. PRINCE MEMORIAL PRIZE FOR HONOURS THESIS

A prize endowed by a bequest in the Will of Professor E.A. Prince. It is awarded to a graduating honours student, who, in the opinion of the Department has written an outstanding honours thesis.

GERALD THEODORE RAYNER PRIZE

(established by Gerald Rayner '51)

Awarded to a student graduating in honours Political Studies, who is a Canadian citizen, who has taken courses in comparative public policy, who is planning to pursue post-graduate work in political studies, public administration or related fields, and who has shown a strong commitment to Canada.

Psychology

DR. SHANNON GADBOIS PRIZE FOR EXCELLENCE IN PSYCHOLOGICAL RESEARCH

(funded annually by Shannon Gadbois, Bishop's 1998, M.A., M.Ed., Ph.D. Queen's)

Awarded to a graduating student in Psychology who has written the best honours dissertation, and who is applying to graduate school. Selected by members of the Department.

Religion

HARRISON PRIZE

Awarded to the outstanding U1 student having completed a minimum of 18 credits in Religion in that year.

LONG PRIZE

Awarded to the outstanding U2 student having completed a minimum of 18 credits in Religion in that year.

W.H. KING MEMORIAL PRIZE

Awarded to the outstanding student graduating with an honours or major degree in Religion.

Science

TOTO-NAICA-BIBU RESEARCH PRIZE

Awarded to a student in Science who presents an outstanding example of research activity.

Women's Studies

FACULTY PRIZE IN WOMEN'S STUDIES

Awarded to a graduating student with high academic standing in Women's Studies.

UNDERGRADUATE PRIZE IN WOMEN'S STUDIES

Awarded to a non-graduating student with high academic standing in a Women's Studies concentration.

Exchange Program

ELIZABETH ANN PENNINGTON TOWERS PRIZE

Awarded to a student who has been approved for an exchange program of one or two semesters in the following academic year, and who has achieved the highest academic average on the best 30 credits of the most recent year of study.

Graduate Studies

THE BEST THESIS PROPOSAL PRIZE

Awarded to the best thesis proposal for a masters degree. Applicant must be a registered full-time master's student. Application to be submitted to Graduate Studies Committee by April 30, including a copy of thesis proposal and recommendation from student's supervisor.

Internships

Nicholas Bachand Canadian Civil Society Internship

(established in 2008)

Value: varies

The internship funding is awarded to a final year student in Political Studies and is associated with the course POL 353 Canadian Civil Society Internship to provide financial support to assist students who wish to pursue practical work-experience related to their studies. The internship is intended to enable students to contribute to the well-being of Canadian society by participating in voluntary and non-profit NGOs.

Elizabeth Harvey Memorial Sustainable Development Internship

(established in 2008)

Value: \$2,000

This internship funding is awarded to a returning student. It is awarded to a student leader who will develop, direct, and maintain student programs on campus which support the efforts of the University to achieve its strategic goal to "operate in an environmentally responsible manner as to promote the wellness of individuals, the community, and the natural world". Possibility of renewal.

McCaig Internship Fund

(established in 2008 through an anonymous bequest in memory of Leslie McCaig '35)

Value: varies

This Internship Fund is used for projects that foster student innovation, initiative and self-reliance, by providing students with financial support to pursue for-credit internships in practical research and job-related experiences. Of educational value to the students, these projects must also involve tangible benefits to the social, cultural, environmental, and/or economic health of the Eastern Townships community. Selection by the Experiential Learning Committee.

Charles & Kathleen Rittenhouse Internship in Arts Administration

(established in 2008 by Jonathan Rittenhouse in memory of his parents)

Value: \$500

This internship funding is awarded to a deserving student in the Arts Administration practicum (AAD353). The recipient will be selected by the program co-ordinator.

TD Insurance Meloche Monnex Internship

(funded annually since 2009 by Alumni Association affinity partner TD Insurance Meloche Monnex)

Value: varies

This internship funding provides financial support (for airfare and living arrangements) for students completing international internships abroad as part of the International Studies program (INT 300 – International Development Assistance Internship). Selection by the Department of Political Studies

Administration, Faculty and Staff

Administrative Organization

Bishop's University operates under the terms of an act of incorporation passed in 1843, and amended in 1852, 1927, and 1947, by the legislature of Quebec.

Jurisdiction and final authority in all the affairs of the University are vested in the Corporation, consisting of the Bishops of the Dioceses of the Anglican Church of Canada situated in Quebec as Visitors, and the Trustees, numbering not less than twenty-one. At least six Trustees are appointed from the faculty, three from the student body and one from the staff. The remaining Trustees are community representatives, including three or more alumni.

The Executive Committee of Corporation has the authority to exercise all the powers held by that body between its meetings except that it cannot change the Rules, Orders and Regulations of the University, or appoint the Chancellor or the Principal. The Executive Committee consists of the Chancellor, the President and the Vice-President of Corporation, the Principal, the Vice-Principals, the academic Deans, nine community representatives, six members of faculty, three students, and a representative of the non-teaching staff.

The Convocation of the University consists of the Chancellor, the Principal, the Vice-Principal, the President and Vice-President

of Corporation, the Chairman and Vice-Chairman of the Executive Committee, the Deans, the Professors and members of the alumni. The Convocation confers degrees in course upon the recommendation of the Senate, and honorary degrees upon the recommendation of a Degree Committee drawn from its own members.

The Chancellor presides over Convocation at its meetings, and confers degrees in the name of the University. He is elected by the Corporation for a term of five years. The Principal, the Vice-Principals, the Chief Librarian, the Dean of Student Affairs, and the Registrar and Secretary-General are appointed by the Corporation after consultation with the Senate. The Principal is the Vice-Chancellor and the Chief Executive Officer of the Corporation. The Vice-Principal acts on behalf of the Principal in the affairs of the University.

The academic work and life of the University are governed by the Senate, which also prepares and recommends plans and policies for academic development, and advises the Corporation concerning the academic needs of the University. The Senate is comprised of the Principal, the Vice-Principal, the academic Deans, the Chief Librarian, fourteen members of the faculty, six full-time students and one part-time student.

Former Chancellors of the University

1853–56	The Hon. W. Walker, <i>M.L.C.</i>
1856–58	The Hon. Edward Bowen, <i>D.C.L.</i>
1858–65	The Hon. J.S. Mc Cord, <i>D.C.L.</i>
1865–75	The Hon. Edward Hale, <i>D.C.L.</i>
1875–78	The Hon. George Irvine, <i>D.C.L.</i>
1878–1900	R.W. Heneker <i>D.C.L., LL.D.</i>
1900–26	John Hamilton, <i>M.A., D.C.L.</i>
1926–32	F.E. Meredith, <i>K.C., LL.D., D.C.L.</i>
1932–42	The Hon. R.A.E. Greenshields, <i>D.C.L., LL.D.</i>
1942–50	G.H. Montgomery, <i>K.C., M.A., D.C.L., LL.D.</i>
1950–58	John Bassett, <i>D.C.L., LL.D.</i>
1958–68	The Hon. Mr Justice D.C. Abbott, <i>P.C., B.C.L., D.C.L., LL.D.</i>
1968–74	John H. Price, <i>O.C., O.B.E., M.C., D.C.L.</i>
1974–81	The Hon. Mr. Justice W. Mitchell, <i>B.A., B.C.L., D.C.L.</i>
1981–87	Robert A. Bandeen, <i>O.C., B.A., Ph.D., LL.D., D.C.L.</i>
1987–95	William I.M. Turner, Jr., <i>C.M., B.A.Sc., M.B.A., LL.D., D.C.L.</i>
1995–2005	Alex Paterson, <i>O.C., O.Q. Q.C., B.A., B.C.L., D.C.L., LL.D.</i>

Former Principals of the University

1845–77	Rev. J.H. Nicolls, <i>M.A., D.D., Queen's College, Oxford</i>
1878–85	Rev. J.A. Lobley, <i>M.A., D.C.L., Trinity College, Cambridge</i>
1885–99	Rev. Thomas Adams, <i>M.A., D.C.L., St. John's College, Cambridge</i>
1900–05	Rev. J.P. Whitney, <i>M.A., D.C.L., King's College, Cambridge</i>

1905–06	Rev. T.B. Waitt, <i>M.A., Lincoln College, Oxford</i>
1906–07	Rev. H. de B. Gibbins, <i>M.A., Litt. D., Wadham College, Oxford</i>
1907–19	Rev. R.A. Parrock, <i>M.A., LL.D., D.C.L., Pembroke College, Cambridge</i>
1920–22	Rev. Canon H.H. Bedford-Jones, <i>M.A., D.D., Trinity College, Toronto</i>
1922–47	Rev. A.H. McGreer, <i>O.B.E., M.C., M.A., Toronto; M.A., Queen's College, Oxford; D.C.L., LL.D., D.D.</i>
1948–60	A.R. Jewitt, <i>B.A., Dalhousie; M.A., Corpus Christi College, Oxford; Ph.D. Cornell; LL.D. Dalhousie; D.C.L., Bishop's</i>
1960–69	C.L.O. Glass, <i>B.A., Bishop's; M.A., St. John's College, Oxford; D.C.L. Bishop's; D.d'U., Sherbrooke</i>
1969–70	A.W. Preston, <i>M.A., Edinburgh, M.A., Oxon, D.C.L., Bishop's</i>
1970–76	D.M. Healy, <i>B.A., Alberta; L. ès L. Docteur de l'Université de Paris; D.C.L., Bishop's; D.d'U., Sherbrooke</i>
1976–86	C.I.H. Nicholl, <i>B.Sc., Queen's, M.A., Sc., Ph.D. Toronto, Ph.D., Cantab., D.C.L., Bishop's</i>
1986–95	H.M. Scott, <i>M.A., M.D., Queen's; F.R.C.P.(C); D.C.L.</i>
1995–2004	Janyne M. Hodder, <i>B.A., M.A., McGill, D.C.L.</i>
2004–2007	Robert Poupart, <i>B.A., B.Ph., M.Ps., D.Ps.</i>
2007–2008	Jonathan Rittenhouse (Interim Principal) <i>B.A. Loyola, M.A., Ph.D. Toronto</i>

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Yves Jodoin, *B.A., B.Sp. Adm., M.B.A.*

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 The Vice-President of the Corporation
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 The Vice-Principal Finance and Administration
 The Vice-Principal
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Dave Young

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The Vice-Principal

The Dean of the Williams School of Business

Dean of the School of Education

Dean of Arts and Science

The University Librarian

The Registrar and Secretary General (Secretary; non-voting)

The Director of Continuing Education (non-voting)

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B.Sc., Dip. Ed., (London), A.F.I.M.A.,
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Professor Emeritus of Mathematics

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(Debrecen, Hung.),
Dip. Ed. (Debrecen, Hung.),
Ph.D. (Montréal), Hum.Sc.D.
Professor Emeritus of History

Faculty

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In 1991, then Chancellor William I.M. Turner Jr. established an award for excellence in teaching, in co-operation with the Bishop's University Faculty Council and the Student's Representative Council. This award of \$1,000 is given annually at Convocation to a member of faculty who has made an extraordinary contribution to the education of Bishop's students through teaching. Nominations for the award may come from current students and alumni.

Winners of this prestigious award include:

1991	Dr. Keith Moore, Department of Biology
1992	Dr. Michael Fox Department of Geography
1993	Prof. Lissa McRae Business: Human Resources
1994	Dr. Michael Childs Department of History
1995	Dr. Karl Kuepper Department of German
1996	Dr. Lorne Nelson Department of Physics
1997	Dr. Andrew Knight Department of Political Studies
1998	Dr. Andrea Drumheller Department of Psychology
1999	Dr. Stuart McKelvie Department of Psychology
2000	Dr. Marianne Vigneault Department of Economics
2001	Professor Denise Fortier Business: Management/Human Resources
2002	Dr. Michael Lustigman Department of Sociology
2003	Dr. Dale Stout Department of Psychology
2004	Dr. Karl Wegert Department of History
2005	Professor George Rideout Department of Drama
2006	Dr. Gerry Coulter Department of Sociology
2007	Dr. Harvey W. White <i>Department of Religion</i>
2008	Dr. Marianne Vigneault <i>Department of Economics</i>
2009	Dr. Ambrose Leung <i>Department of Economics</i>

WILLIAMS SCHOOL OF BUSINESS

Dean

Steve R. Harvey,

B.A. (Bishop's), M.A. (Guelph), Ph. D. (Guelph);
Professor
sharvey@ubishops.ca

Hafid Agourram,

B.A. (Rhode Island), M.S. (Calif.) M.A. (Spain),
DBA. (Sherbrooke); Associate Professor

Sylvie A.F.A. Béquet,

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LL.M. (Leicester), DOHS (McMaster), Dip. Ad. Ed.
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B.B.A. (Bishop's), M.B.A. (UQO), Dipl. Ed. Tech
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B.A. (Bishop's), M.A. (Guelph), Ph. D. (Guelph);
Professor

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Diploma HEC, (Paris), M.A. (Yale), Ph.D. (Toronto);
Professor

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B.Sc. (Queens), M.B.A. (McGill); Ph.D. (Concordia);
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Chair of the Department

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B.A. (Moncton), M.Sc. (St. Mary's),
A.B.D. (St. Mary's); Assistant Professor

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B.Sc. (Mexico), M.Sc. (Montreal), Ph.D. (Montreal);
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SCHOOL OF EDUCATION

DEAN

Catherine Beauchamp

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Ph.D. (McGill); Professor
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Avril Aitken,

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Darren Millington

B.A. (Bishop's), M.F.A. (UQAM), Ph.D. (Concordia);
Associate Professor (joint appointment with the Fine
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M.A., (Dalhousie), Ph.D. (Southern California),
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Jo-Jo Rideout,

Diploma (Vancouver Playhouse Acting School);
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Professor

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Professor, Chair of the Department

Stephen Woodward

B.A. (Queens), B.A.A. (Ryerson), M.A., Ph.D.
(Toronto), Associate Professor

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QUÉBÉCOISES****Bertrand Boutin,**

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Chair of the Department

Michel Carle,

L. ès L., M. ès L. (Aix-en-Provence), Ph.D. (Ottawa);
Professor

Jean Levasseur,

B.A. (Montréal), M. ès L. (Navarra), D.E.A.
(Bordeaux), Doctorat (Bordeaux);
Professor

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Chair of the Department

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B.F.A., M.F.A.(UQAM); Special Instructor

Claude Lacroix,

B.F.A (Ottawa), M.A.(Montreal), Ph.D. (École des
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AssociateProfessor,
Coordinator of Art History Program

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B.Ed. (Toronto); Professor

Darren Millington

B.A. (Bishop's), M.F.A.(UQAM), Ph.D. (Concordia);
Assistant Professor

Laurie Milner — sessional appointment

B.A., (Guelph), M.A., Ph.D. (Northwestern)

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