

Economics

Faculty

Elise Cristoph,

B.A. (Concordia), M.A. (Concordia)

PhD. (Ottawa); Assistant Professor

Terry Eyland,

B.B.A. (Bishop's), M.A. (Ottawa),

PhD. (HEC Montréal); Associate Professor

Marianne Vigneault,

B.A. (Bishop's), M.A. (Queen's), Ph.D. (Queen's);

Professor

Chair of the Department

Program Overview

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, Political Economy, 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 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 International Political Economy.

Entrance Requirements

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) MAT 196 is a required course for all Economics programs except the Minor and B.A. Honours or Major in International Political Economy. * MAT 196 and MAT 191 are required courses for the B.A Honours Mathematical Economics, and B.A. Major Economics. MAT 108, MAT 192 and MAT 206 are required courses for the B.A Honours Mathematical Economics.
- (ii) A student having a Québec Collegial Diploma (D.E.C.) including Linear Algebra, Differential Calculus, and Integral Calculus may be exempted from MAT 191, MAT 192, and MAT 196. Students granted exemption must substitute these courses with free elective courses. Students lacking the appropriate preparation for MAT 191 or MAT 196 will be required to successfully complete an additional mathematics course (MAT 190) as a free elective..

b) Statistics

Students are also required to have completed a course in Introductory Statistics, equivalent to BMA 140 as a prerequisite for all Economics programs. Students who are required to take BMA 140 will use this course as a free elective.

2. Transfers from Other Bishop's Programs

Rules pertaining to transfer into Department of Economics Major or Honours programs are published in the Undergraduate Academic Regulations, under the article “Change of Degrees or Degree Components.”

3. Double Failure Rule

Rules pertaining to the double failure of a course are published in the Undergraduate Academic Regulations, under the article “Double Failure Rule.”

Programs in Economics

Economics Honours: Mathematical Economics Concentration (B.A.) HONECM

The Economics Honours: Mathematical Economics Concentration (B.A.) is a 120-credit degree program plus ILT 104 (1 lab credit). It is designed to provide students with a solid preparation for graduate studies in Economics.

Requirements of the B.A. program are:

Required courses in Economics	24 credits
Elective courses in Economics*	15 credits
Required courses in Mathematics	12 credits
Mathematics elective courses	6 credits
Required course in Statistics	3 credits
Required course in Computer Science	3 credits
Free Electives**	57 credits
Total	120 credits + ILT104 (1 lab credit)

* Up to 6 of the total required credits in this category can be met, with departmental approval, by a selection of courses in cognate areas.

** At least 12 credits in this category must be earned outside of the Department of Economics.

Information Retrieval

ILT 104	Information Retrieval and Evaluation Skills for the Social Sciences
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Required courses in Economics (Total of 24 credits)

ECO 102	Principles of Economics: Microeconomics
ECO 103	Principles of Economics: Macroeconomics
ECO 208	Intermediate Microeconomics I
ECO 209	Intermediate Microeconomics II
ECO 212	Intermediate Macroeconomics
EMA 261	Econometrics I
EMA 262*	Mathematical Economics I
ECO 361	Applied Economic Analysis

*EMA 262 is offered in alternate years.

Required courses in Mathematics (Total of 12 credits)

MAT 108	Matrix Algebra
MAT 191	Calculus I †
MAT 192	Calculus II †
MAT 206	Advanced Calculus I

† These courses have a 1.5-hour laboratory work component.

Required course in Statistics (Total of 3 credits)

BMA 141	Statistical Analysis for Business Decisions II or
PHY 101	Statistical Methods in Experimental Science or
PMA 260	Psychological Statistics

Required course in Computer Science (Total of 3 credits)

CSC 211/ CSL 211 Introduction to Programming †

† This course currently has a corequisite, 1-credit tutorial session course, CSL 211

Recommended Course Sequence

Recommended Course Sequences for the HONECM program is provided below for students in a four-year program. For Cegep students, credit for required courses and free elective credits reduce the overall sequence to three years. Some courses are prerequisites for other courses. Please consult the course descriptions.

	Fall	Winter
Year 1	ECO 102 MAT 191 ILT 104 ECO elective 2 free electives***	ECO 103 MAT 192 BMA 141, PHY 101, or PMA 260 ECO elective Free elective
Year 2	ECO 208* EMA 261* or ECO elective Free or MAT elective Free or MAT elective Free Elective	ECO 209 or ECO elective ECO 212* MAT elective EMA 262** or free elective Free or MAT elective
Year 3	MAT108 EMA 261* or ECO elective MAT 206 CSC 211 Free Elective	ECO209 or ECO elective EMA 262** or free elective ECO 361 or ECO elective Free or MAT elective Free or MAT elective
Year 4	Free or MAT elective Free or MAT elective 3 free electives	ECO elective ECO 361 or ECO elective 3 free electives

*ECO 208 is offered in the Fall semester and ECO 212 is offered in the Winter semester. EMA 261 must be taken before ECO 361.

**Offered bi-annually

*** Students that have not completed the equivalent of BMA 140 should do so as a free elective.

Economics Major (B.A.)

The Economics Major (B.A.) consists of 120 credits + ILT 104 (1 lab credit).

Requirements of the program are:

Mathematics	6 credits
Quantitative Methods	6 credits
Required courses in Economics	18 credits
Elective courses in Economics*	18 credits
Free Electives**	72 credits
Total	120 credits + ILT 104 (1 lab credit)

*Up to 6 of the total required credits in this category can be met, with departmental approval, by a selection of courses in cognate areas.

**At least 15 credits in this category must be earned outside of the Department of Economics.

Information Retrieval

ILT 104 Information Retrieval and Evaluation Skills for the Social Sciences

Quantitative Methods (6 credits)

BMA 141 Statistical Analysis for Business Decisions II
EMA 261 Econometrics I

Mathematics (6 credits)

MAT 191 Calculus I†
MAT 196 Finite Mathematics for Business Students

† This course has a 1.5 hour laboratory work component.

Required Courses in Economics (18 credits)

ECO 102 Principles of Economics: Microeconomics
ECO 103 Principles of Economics: Macroeconomics
ECO 208 Intermediate Microeconomics I
ECO 209 Intermediate Microeconomics II
ECO 212 Intermediate Macroeconomics
ECO 361 Applied Economic Analysis

MAJECO

Recommended Course Sequence

Recommended Course Sequences for the MAJECO program is provided below for students in a four year program. For Cegep students, credit for required courses and free elective credits reduce the overall sequence to three years. Some courses are prerequisites for other courses. Please consult the course descriptions.

	Fall	Winter
Year 1	ECO 102 and/or ECO 103 MAT 196 ILT 104 ECO elective 2 free electives**	ECO 102 and/or ECO 103 BMA 141 ECO elective 2 free electives
Year 2	ECO 208* ECO 212* EMA 261* or ECO elective MAT 191 or free elective Free Elective	ECO 209 or ECO elective ECO elective 3 free electives
Year 3	EMA 261* or ECO elective MAT191 or free elective ECO elective 2 free electives	ECO 209 or ECO elective ECO361 or ECO elective ECO elective 2 free electives
Year 4	ECO or free elective 4 free electives	ECO 361 or ECO elective ECO or free elective 3 free electives

*ECO 208 is offered in the Fall semester and ECO 212 is offered in the Winter semester. EMA 261 must be taken before ECO 361.

** Students that have not completed the equivalent of BMA 140 should do so as a free elective.

Economics Major: Business Economics Concentration (B.A.) MAJECB

Students wishing to develop expertise in specific areas of Economics and Business can elect to follow the Business Economics Concentration (MAJECB).

The Economics Major: Business Economics Concentration (B.A.) consists of 120 credits + ILT 104 (1 lab credit).

Requirements of the program are:

Mathematics	3 credits
Quantitative Methods	6 credits
Required courses in Economics	15 credits
Required courses in Concentration	18 credits
Free Electives*	78 credits

Total 120 credits + ILT104 (1 lab credit)

* At least 15 credits in this category must be earned outside of the Department of Economics.

Information Retrieval

ILT 104	Information Retrieval and Evaluation Skills for the Social Sciences
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Quantitative Methods

BMA 141	Statistical Analysis for Business Students
EMA 261	Econometrics I

Mathematics

MAT 196	Finite Mathematics for Business Students
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Required courses in Economics

ECO 102	Principles of Economics: Microeconomics
ECO 103	Principles of Economics: Macroeconomics
ECO 208	Intermediate Microeconomics I
ECO 212	Intermediate Macroeconomics
ECO 361	Applied Economic Analysis

Required Courses in Business Economics Concentration (MAJECB): Any six of the following:

ECO 105	Behavioural Economics
ECO 124	Sports Economics
ECO 200	Money and Banking
ECO 204	Labour Economics
ECO 217	International Economics
ECO 218	Managerial Economics
ECO 270	Public Economics
ECO 305	Game Theory
ECO 322	Real Estate Economics

With departmental approval, students can satisfy up to 6 of the 18-credit requirement from courses in Business.

Recommended Course Sequence

Recommended Course Sequences for the MAJECB program is provided below for students in a four year program. For Cegep students, credit for required courses and free elective credits reduce the overall sequence to three years. Some courses are prerequisites for other courses. Please consult the course descriptions.

	Fall	Winter
Year 1	ECO 102 MAT 196 ILT 104 3 free electives***	ECO 103 BMA 141 Concentration elective 2 free electives
Year 2	ECO 208* EMA 261* or concentration elective 3 free electives	ECO 212* 2 concentration electives 2 free electives
Year 3	EMA 261* or concentration elective Concentration or free elective 3 free electives	ECO 361 or concentration elective Concentration or free elective 3 free electives
Year 4	Concentration or free elective 4 free electives	ECO 361 or concentration elective 4 free electives

*ECO 208 is offered in the Fall semester and ECO 212 is offered in the Winter semester. EMA 261 must be taken before ECO 361.

** Students that have not completed the equivalent of BMA 140 should do so as a free elective.

Economics Minor (24 credits)

MINECO

The Economics Minor consists of any 24 credits* in Economics including ECO 102 and ECO 103, plus ILT 104 or its equivalent. Students considering a minor in Economics should consult the Chair 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 BMA 141: 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.

International Political Economy

Honours (B.A.)

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The International Political Economy Honours (B.A.) programs are offered jointly by the Departments of Economics and Politics and International 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 Honours program in International Political Economy consists of at least 60 credits, with 30 credits drawn from Politics and International Studies and 30 from Economics.

To enter or continue in an Honours program, students must normally obtain and sustain a cumulative average of 75 % in the Politics and International 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.

Economics Requirements (30 credits)

Required Economics Courses (15 credits):

ECO 102	Principles of Economics: Microeconomics
ECO 103	Principles of Economics: Macroeconomics
ECO 212	Intermediate Macroeconomics
ECO 270	Public Economics

One of the following courses:

ECO 125	Economic Development I: Human Development Problems and Policies
ECO 175	Economic Geography
ECO 180	Contemporary Perspectives in Political Economy
ECO 217	International Economics
ECO 251	History of Economic Thought I

Elective Economics Courses (15 credits):

The remaining 15 credits to be taken from any area of Economics

Politics and International Studies Requirements

(30 credits)

Required Courses:

POL 101	Introduction to Comparative Politics
POL 140	Introduction to International Relations
POL 240	International Political Economy
POL 361	Techniques of Quantitative Research

Plus two of:

POL 217	Business and Government
POL 241	International Affairs
POL 242	International Organizations
POL 317	Canadian Welfare State
POL 344	Politics of International Trade and Investment
POL 346	Politics of Global Finance

Plus:

One POL 400 level course

Plus Free Elective Courses in Politics and International Studies: 9 credits (3 POL courses)

Note that some of these courses may have prerequisites or, alternatively, require permission from the instructor.

To enter and remain in the Honours program, students must normally attain a cumulative average of 75% in program courses. Honours students who do not meet this average requirement at graduation will automatically revert to the Major program.

International Political Economy Major

(B.A.)

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The International Political Economy Major (B.A.) consists of at least 48 credits, with 24 credits drawn from Politics and International Studies and 24 from Economics.

Economics Requirements (24 credits)

Required Economics Courses (9 credits):

ECO 102	Principles of Economics: Microeconomics
ECO 103	Principles of Economics: Macroeconomics

One of the following courses:

ECO 125	Economic Development I: Human Development Problems and Policies
ECO 175	Economic Geography
ECO 180	Contemporary Perspectives in Political Economy
ECO 217	International Economics
ECO 251	History of Economic Thought I
ECO 270	Public Economics

Elective Economics Courses (15 credits):

The remaining 15 credits to be taken from any area of Economics

Politics and International Studies Requirements (24 credits)

Required Courses:

POL 101	Introduction to Comparative Politics
POL 140	Introduction to International Relations
POL 240	International Political Economy

Plus two of:

POL 217	Business and Government
POL 241	International Affairs
POL 242	International Organizations
POL 317	Canadian Welfare State
POL 344	Politics of International Trade and Investment
POL 346	Politics of Global Finance

Plus Free Elective Courses in Politics and International Studies:

9 credits (3 POL courses)

Note that some of these courses may have pre-requisites or, alternatively, require permission from the instructor

List of Courses

ECO 100 Economic Life/ Economic Society 3-3-0

An historical and descriptive approach to understanding how economic activity and the modern economy can be understood from the broader social context in which human beings interact. The course provides an introduction to the study of economic relationships and economic society.

ECO 102 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.

ECO 103 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.

ECO 105 Behavioural Economics 3-3-0

This course introduces students to the relatively new field of behavioural economics. It goes beyond the rational behaviour seen in typical economics courses and studies models that are combined with psychologically plausible assumptions of behaviour. Topics will include choice under risk and uncertainty, bounded rationality, intertemporal choice, behavioural choice, behavioural game theory, procrastination, altruism, and reciprocity.

ECO 109 Economic Policy 3-3-0

Economics is studied for its policy implications. This course will examine problems, policies, institutions, and controversies in public policy regarding the economy in Canada from both an analytical and a historical perspective.

ECO 115 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.

ECO 118 Canadian Economic Development 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.

ECO 119 Canadian Economic Development 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.

Prerequisite: ECO 102

ECO 124 Sports Economics 3-3-0

The course provides a general introduction to microeconomic concepts through an analysis of professional sports. Among the topics covered are the market for sports, the market for athletic talent, pricing decisions, labour relations, and the role of public policy. The field draws from several important subfields of microeconomics, including game theory, industrial organization, public economics, labour economics, and the economics of information.

Antirequisite: Not available for credit for students having taken ECO 224.

ECO 125 Economic Development I: Human Development Problems and Policies 3-3-0

The course provides an introduction to the concept of economic development and an analysis of domestic problems facing developing countries, including poverty and inequality, population growth, education, rural development, unemployment, and the environment.

ECO 126 Economics of Crime and Criminal Justice 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.

ECO 131 A History of Major Economic Events: 1750 to the present 3-3-0

This course is a non-technical introduction to some of the basic concepts of economics through an historical review of the most important economic events of the last two hundred years. A variety of topics are discussed from the Industrial Revolution in Great Britain, the Great Depression, the construction of Europe, to the most recent Financial Crises that led to the Great Recession. Special attention is given to the parallels that can be drawn from past economic events with current ones.

ECO 175 Economic Geography 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.

This course is cross-listed with ESG 175.

ECO 180 Contemporary Perspectives in Political Economy 3-3-0

This course develops core contemporary perspectives in political economy within an international context. This course is neither a course in political science nor a course in economics, but rather a course that stresses the interaction of the two disciplines.

Students who received credit for ECO280 cannot receive credit for ECO180

ECO 200 Money and Banking 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.

Prerequisite: ECO 103

ECO 204 Labour 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.

Prerequisite: ECO 102

ECO 206	Economics of the Agri-Food System	3-3-0	ECO 270	Public Economics	3-3-0
This course introduces students to the major aspects of economics, business and resource use in the Canadian agri-food sector. Topics include agricultural supply and demand, markets, prices, agribusiness financing, farm risk management, government policies, international trade in agricultural products, and the circular economy. <i>This course is cross-listed with AGR 206. Credits will only be given for one of ECO 206 or AGR 206</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>Prerequisite: ECO 102</i>		
ECO 208	Intermediate Microeconomics I	3-3-0	ECO 305	Game Theory with Applications to 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: ECO 102 and MAT 196</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>Prerequisite: ECO 208</i>		
ECO 209	Intermediate Microeconomics II	3-3-0	ECO 310	Economics Internship	3-0-0
Consumer Theory, Decision Theory under Risk and Uncertainty, Information, and Microeconomic applications. <i>Prerequisites: ECO 208 and MAT 191</i>			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.		
ECO 210	Economics and the Law	3-3-0	ECO 322	Real Estate 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>			This course provides students with an understanding of the elements to consider when purchasing Real Estate. First, students will learn to build a model using excel to evaluate the optimal financial decision between buying a house versus renting and generating interest/gains with the money saved. Topics include, taxation, compounding, discounting, mortgage fees. Second, it looks at Real Estate valuation techniques and the economics behind price fluctuations. <i>Prerequisite: ECO 103</i>		
ECO 212	Intermediate Macroeconomics	3-3-0	ECO 337	Ecological Economics	3-3-0
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>Prerequisite: ECO 103</i>			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. <i>Prerequisites: ECO 102 and ECO 103</i>		
ECO 217	International Economics	3-3-0	ECO 342	Advanced Macroeconomics	3-3-0
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>			With departmental approval, to be taken at Université de Sherbrooke, at an exchange university, or online at another university. Students must make the necessary arrangements for completing ECO 342 and ECO 343. <i>Prerequisites: ECO 212, EMA 261 and EMA 262 or equivalent</i>		
ECO 218	Managerial Economics	3-3-0	ECO 343	Advanced Microeconomics	3-3-0
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>Prerequisite: ECO 102</i>			With departmental approval, to be taken at Université de Sherbrooke, at an exchange university, or online at another university. Students must make the necessary arrangements for completing ECO 342 and ECO 343. <i>Prerequisite: ECO 209, EMA 261 and EMA 262 or equivalent</i>		
ECO 225	Economic Development II: Macroeconomic and Policy Issues	3-3-0	ECO 344	Independent Study	3-0-0
An introduction to models of economic growth. 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. An introduction to the techniques of evaluating development projects. <i>Prerequisites: ECO 102 and ECO 103</i>			Individual study and research under the guidance of an advisor. <i>Prerequisites: Permission of the Department and instructor. ECO 208 and ECO 212</i>		
ECO 236	Contemporary Economic Issues	3-3-0	ECO 345	Independent Study	3-0-0
Application of tools of economic analysis to selected issues and problems in Canada. <i>Prerequisite: ECO 103</i>			Individual study and research under the guidance of an advisor. <i>Prerequisites: Permission of the Department and instructor. ECO 208 and ECO 212</i>		
ECO 237	Economics of the Environment	3-3-0	ECO 351	History of Economic Thought II	3-3-0
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.			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. <i>Prerequisites: ECO 102, ECO 103, and ECO 251</i>		
ECO 251	History of Economic Thought I	3-3-0	ECO 361	Applied Economic Analysis	3-3-0
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>Prerequisites: ECO 102 and ECO 103 Offered in rotation with ECO 180</i>			The purpose of this course is to provide students with a basic understanding of conducting applied economic analysis. It builds upon the student's knowledge of basic econometrics and allows him/her to use this knowledge to analyze real-world data and undertake original empirical analyses. Written and oral dissemination of results is also emphasized as important skills. <i>Prerequisites: EMA261, ECO 208 and ECO 212</i>		

ECO 365 Honours Seminar 3-3-0

The purpose of this course is to prepare the student for advanced economic research leading up to original empirical and/or theoretical research undertaken by the student for his/her honours thesis and for research undertaken at the graduate level and beyond. Areas covered include: selection of a research topic, literature survey, theoretical and empirical analyses including model building, formulation of a research question and hypothesis, and testing hypotheses.

Prerequisites: ECO 209 and EMA 261

ECO 370 Honours Thesis 3-0-0

Continuation of ECO 360. 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 ECO 360. The student will present the research results in a seminar to be scheduled in the last two weeks of class.

Prerequisite: ECO 365

Courses for Mathematics

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

This course provides an overview of fundamental statistical and mathematical concepts needed to perform statistical data analysis to support business decisionmaking such as probability, random variables, descriptive statistics, and common probability distributions.

Prerequisite: MAT 190

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

This course provides an overview of advanced statistical and mathematical concepts needed to perform statistical data analysis to support business decisionmaking and projections such as 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

Note: this course may not be taken for credit by Science students.

EMA 261 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.

Prerequisites: ECO 102, ECO 103, and BMA 141

EMA 262 Mathematical Economics I 3-3-0

The application of matrix algebra and multivariate calculus to model-building and problem-solving in Economics.

Prerequisites: ECO 102, ECO 103, MAT 196 and MAT 192 or MAT 197

Cross-listed with MAT 172

EMA 265 Applied Time Series Analysis 3-3-0

This course provides an introduction to applied time series analysis. Students learn skills required for empirical analysis with time series data, with particular emphasis on macroeconomic and financial economic analysis and forecasting. Topics include autocorrelation, stationary and non-stationary time series models, autoregressive models, ARMA and ARIMA models, VAR models, VECM models, ARCH models. Econometric software is used.

Prerequisite: BMA 141 or equivalent

EMA 361 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: EMA 261, ECO 208 and ECO 212

EMA 362 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: EMA 262, ECO 208 and ECO 212

Cognate Courses

A number of cognate courses may be taken in such areas as Business Administration, Mathematics, Computer Science, Environment, Agriculture and Geography, and Political Studies. Consult the Chair of the Department for the full range of possibilities.