

# ECONOMICS

## Departmental Notes

*Subject Code for Applied Economics:* **APEC**

*Subject Code for Economics:* **ECON**

*Subject Code for Politics-Philosophy-Economics:* **PPEC**

*World Wide Web Address:* [www.econ.queensu.ca/](http://www.econ.queensu.ca/) (<http://www.econ.queensu.ca/>)

*Head of Department:* Allen Head ([heada@econ.queensu.ca](mailto:heada@econ.queensu.ca))

*Department Manager:* Alex Fox ([alexandra.fox@queensu.ca](mailto:alexandra.fox@queensu.ca))

*Undergraduate Office:* Dunning Hall, Room 221

*Departmental Telephone:* 613-533-2250

*Departmental Fax:* 613-533-6668

*Chair of Undergraduate Studies:* Ian Cromb

([crombi@queensu.ca](mailto:crombi@queensu.ca))

*Undergraduate Office Telephone:* 613-533-2296

*Undergraduate Office E-Mail Address:* [econugrd@queensu.ca](mailto:econugrd@queensu.ca)

*Coordinator of Graduate Studies:* Jan Zabochnik

([zabochnik@econ.queensu.ca](mailto:zabochnik@econ.queensu.ca))

*Graduate Office E-Mail Address:* [econgrda@queensu.ca](mailto:econgrda@queensu.ca)

## Overview

The Economics Department at Queen's has a long tradition as one of Canada's leading teaching and research centres in economics. The undergraduate programs we offer promote a comprehensive investigation of many aspects of the subject, with an emphasis on contemporary analytical principles and methods. Those who pursue a concentration in economics or applied economics will take courses in advanced economic analysis, statistical techniques, the historical background of today's economies, and the application of economic theory to public finance, international relations, natural resources and the environment, business cycles, labour markets, and the economic systems of other countries. Economics students at Queen's acquire a diverse portfolio of analytical, quantitative, computational, and communications skills that provide excellent preparation for a wide range of post-graduation education and career opportunities. Our recent graduates have pursued graduate studies in economics and professional programs such as finance, business administration, public administration, law, industrial relations, information technology, and resource management, and they have embarked on careers in the private sector, with non-governmental organizations and with the public sector in key positions of responsibility at all three levels of government.

## Advice to Students

### First Year Mathematics

All Economics Plans require a supporting course in first year calculus. Normally this course is taken in first year. Students choose MATH 126 (for those without any prior knowledge of calculus) or MATH 121 (for those who have taken calculus in high school). The calculus courses MATH 120 or (MATH 123 and MATH 124) may also be accepted. Note that first year calculus is a corequisite for ECON 212, ECON 222, and ECON 250 and a prerequisite for ECON 255 and all third- and fourth-year economics courses.

### Elective Courses

The Department provides several options for students studying other subjects who wish to take one or more courses in economics. Students wishing to take a 200-level course should take ECON 111 or ECON 112 as required, followed by the 200-level course of interest. All Economics Plans require ECON 110, or ECON 111 and ECON 112.

## Special Study Opportunities

**Study Abroad Option at Bader College** (<https://www.queensu.ca/bisc/>) **(formerly the BISC) or on Exchange** Economics Majors and Joint Honours who plan to attend Bader College or go on exchange should do so before their fourth year. These students should plan to have completed by the end of their third year:

1. a total of at least 84.00 units;
2. all 300-level ECON courses required for their Plan, with particular emphasis on ECON 310, ECON 320 and ECON 351;
3. at least 42.00 ECON units in the case of ECON and APEC Majors, and at least 27.00 ECON units in the case of ECON Joint Honours.

## Faculty

- Brant Abbott (<https://www.econ.queensu.ca/people/faculty/brant-abbott/>)
- Michael Barber (<https://www.econ.queensu.ca/people/faculty/michael-barber/>)
- Mons Chan (<https://www.econ.queensu.ca/people/faculty/mons-chan/>)
- Robert Clark (<https://www.econ.queensu.ca/people/faculty/robert-clark/>)
- Christopher Cotton (<https://www.econ.queensu.ca/people/faculty/christopher-cotton/>)



- Ian Cromb (<https://www.econ.queensu.ca/people/faculty/ian-cromb/>)
- Fr. Raymond de Souza (<https://www.econ.queensu.ca/people/faculty/fr-raymond-de-souza/>)
- Weili Ding (<https://www.econ.queensu.ca/people/faculty/weili-ding/>)
- Christopher Ferrall (<https://www.econ.queensu.ca/people/faculty/christopher-ferrall/>)
- Devon Garvie (<https://www.econ.queensu.ca/people/faculty/devon-garvie/>)
- Anya Hageman (<https://www.econ.queensu.ca/people/faculty/anya-hageman/>)
- Allen Head (<https://www.econ.queensu.ca/people/faculty/allen-head/>)
- Ian Keay (<https://www.econ.queensu.ca/people/faculty/ian-keay/>)
- Mike Kennedy (<https://www.econ.queensu.ca/people/faculty/mike-kennedy/>)
- Thorsten Koeppl (<https://www.econ.queensu.ca/people/faculty/thorsten-v-koeppl/>)
- Beverly Lapham (<https://www.econ.queensu.ca/people/faculty/beverly-lapham/>)
- Steven Lehrer (<https://www.econ.queensu.ca/people/faculty/steven-lehrer/>)
- Sitian Liu (<https://www.econ.queensu.ca/people/faculty/sitian-liu/>)
- Huw Lloyd-Ellis (<https://www.econ.queensu.ca/people/faculty/huw-lloyd-ellis/>)
- James G. MacKinnon (<https://www.econ.queensu.ca/people/faculty/james-g-mackinnon/>)
- Sumon Majumdar (<https://www.econ.queensu.ca/people/faculty/sumon-majumdar/>)
- Frank Milne (<https://www.econ.queensu.ca/people/faculty/frank-milne/>)
- Gregor W. Smith (<https://www.econ.queensu.ca/people/faculty/gregor-w-smith/>)
- Amy Hongfei Sun (<https://www.econ.queensu.ca/people/faculty/amy-hongfei-sun/>)
- Ruqu Wang (<https://www.econ.queensu.ca/people/faculty/ruqu-wang/>)
- Ming Xu (<https://www.econ.queensu.ca/people/faculty/ming-xu/>)
- Karen Ye (<https://www.econ.queensu.ca/people/faculty/karen-ye/>)
- Jan Zabochnik (<https://www.econ.queensu.ca/people/faculty/jan-zabochnik/>)
- Nahim Bin Zahur (<https://www.econ.queensu.ca/people/faculty/nahim-bin-zahur/>)

### Specialization

- Politics, Philosophy and Economics – Specialization (Arts) – Bachelor of Arts (Honours) (<https://queensu-ca-public.courseleaf.com/archive/2022-2023/arts-science/schools-departments-programs/economics/politics-philosophy-economics-specialization-arts-ba-honours/>)

### Majors

- Applied Economics – Major (Arts) – Bachelor of Arts (Honours) (<https://queensu-ca-public.courseleaf.com/archive/2022-2023/arts-science/schools-departments-programs/economics/applied-economics-major-arts-ba-honours/>)
- Economics – Major (Arts) – Bachelor of Arts (Honours) (<https://queensu-ca-public.courseleaf.com/archive/2022-2023/arts-science/schools-departments-programs/economics/economics-major-arts-ba-honours/>)

### Joint Honours

- Economics – Joint Honours (Arts) – Bachelor of Arts (Honours) (<https://queensu-ca-public.courseleaf.com/archive/2022-2023/arts-science/schools-departments-programs/economics/economics-medial-arts-ba-honours/>)

### General/Minor

- Economics – General (Arts) – Bachelor of Arts (<https://queensu-ca-public.courseleaf.com/archive/2022-2023/arts-science/schools-departments-programs/economics/economics-general-arts-ba/>)
- Economics – Minor (Arts) (<https://queensu-ca-public.courseleaf.com/archive/2022-2023/arts-science/schools-departments-programs/economics/economics-minor-arts/>)

## Courses

### Economics (ECON)

#### **ECON 110 Principles of Economics Units: 6.00**

An introduction to economic analysis of a modern mixed economy, including the roles of government. The microeconomics part of the course analyzes the behaviour of individual consumers and producers and the functioning of the market price system. The macroeconomics part examines the functioning of the economy as a whole, including the determination of national income, the price level, interest rates, the money supply, and the balance of payments.

**Learning Hours:** 240 (72 Lecture, 24 Online Activity, 144 Private Study)

**Requirements:** Prerequisite None. Exclusion ECON 111; ECON 112; COMM 171; COMM 172.

**Offering Faculty:** Faculty of Arts and Science

#### **ECON 111 Introductory Microeconomics Units: 3.00**

An introduction to microeconomic analysis of a modern mixed economy. The course analyzes the behaviour of individual consumers and producers, the determination of market prices for commodities and resources, and the role of government policy in the functioning of the market system. NOTE ECON 111 and ECON 112 together, are equivalent to ECON 110.

NOTE Also offered online. Consult Arts and Science Online. Learning Hours may vary.

NOTE Also offered at the Bader International Studies Centre, Herstmonceux. Learning Hours may vary.

**Learning Hours:** 120 (36 Lecture, 12 Online Activity, 72 Private Study)

**Requirements:** Prerequisite None. Exclusion ECON 110; COMM 171; COMM 172.

**Offering Faculty:** Faculty of Arts and Science

#### **ECON 112 Introductory Macroeconomics Units: 3.00**

An introduction to macroeconomic analysis of the economy as a whole, including the determination of national income, the price level, interest rates, the money supply, and the balance of payments. The principles of monetary and fiscal policy are also examined.

NOTE ECON 111 and ECON 112 together, are equivalent to ECON 110.

NOTE Also offered online. Consult Arts and Science Online, Learning Hours may vary.

NOTE Also offered at the Bader International Studies Centre, Herstmonceux, Learning Hours may vary.

**Learning Hours:** 120 (36 Lecture, 12 Online Activity, 72 Private Study)

**Requirements:** Prerequisite None. Exclusion ECON 110; COMM 171; COMM 172.

**Offering Faculty:** Faculty of Arts and Science

#### **ECON 212 Microeconomic Theory I Units: 3.00**

Theory of markets and prices: decision-making by individuals and firms, equilibrium conditions under various market structures, and issues of individual and social welfare. This course presumes a knowledge of calculus at the first-year university level.

NOTE A grade of C in this course is required as a prerequisite for ECON 310.

NOTE Also offered online. Consult Arts and Science Online. Learning Hours may vary.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 110 or (ECON 111 and ECON 112) or (COMM 171 and COMM 172). Corequisite (MATH 120 or MATH 121 or [MATH 123 and MATH 124] or MATH 126 or APSC 172 or COMM 161).

**Offering Faculty:** Faculty of Arts and Science

#### **ECON 222 Macroeconomic Theory I Units: 3.00**

A study of the basic models of national income determination and financial markets. The course includes application to policy problems such as inflation, unemployment and balance of payments disequilibria.

NOTE A grade of C in this course is required as a prerequisite for ECON 320.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 110 or (ECON 111 and ECON 112) or (COMM 171 and COMM 172). Corequisite (MATH 120 or MATH 121 or [MATH 123 and MATH 124] or MATH 126 or APSC 172 or COMM 161).

**Offering Faculty:** Faculty of Arts and Science

#### **ECON 223 Macroeconomic Policy Units: 3.00**

Current topics in macroeconomic policy which may include: unemployment and policies to reduce it, government budget deficits, supply-side controversies, financial deregulation, policy coordination, and management of exchange rates. Comparison of policies in Canada, the United States, and other OECD countries.

NOTE Also offered online. Consult Arts and Science Online, Learning Hours may vary.

**Learning Hours:** 120 (24 Lecture, 12 Group Learning, 48 Online Activity, 36 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 112 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science



**ECON 225 The Economics of the European Community Units: 3.00**

This course will focus on two major topics: a) the process of economic integration towards a common market in Europe; and b) the coordination of macroeconomic policy within Europe, the operation of the European Monetary System and the movement towards European Union.

NOTE Offered only at the Bader International Study Centre, Herstmonceux.

**Learning Hours:** 120 (36 Lecture, 24 Off-Campus Activity, 60 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 112 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 231 Emergence of the Modern Industrial Economy Units: 3.00**

An examination of the origins of modern economic growth concentrating on the industrial revolution in Britain and the prior developments leading up to it. Some attention is directed to the early followers of the changes initiated in Britain.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 232 The Diffusion of Modern Economic Growth Units: 3.00**

The spread of industrialization and economic development in Europe and areas beyond in the late 19th and early 20th centuries. The geographic focus may differ from year to year but Germany, Russia and Japan are usually included.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 239 Economic Development Units: 3.00**

A survey of the various economic theories and models elaborating the process of development. The course considers the meaning of economic development; the fundamental analytics of economic growth; the barriers to growth; balanced and unbalanced strategies of growth; population, employment and technology problems; foreign-trade and foreign aid issues.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 240 Canadian Tax Policy Units: 3.00**

The incentive effects of taxes on the allocation of resources in the economy and their impact on the distribution of wealth in Canada. Reviews Canadian tax policy and evaluates the effects of various federal and provincial taxes on the behaviour of households and firms.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 241 Economic Aspects of Selected Social Issues Units: 3.00**

An application of economic analysis to a selection of public policy issues. The topics covered will vary from year to year, but examples include regulation of agricultural and industrial markets, health economics, trade policy, natural resource policy, property rights and the 'external' effects of private activities. This course should be of special interest to students of law, political studies and sociology as well as economics.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 243 The Economics of Health Care Units: 3.00**

An economic analysis of modern health care institutions, organizations, and markets, both generically and in the Canadian context. A discussion of current Canadian health policy debates and various policy options and reform proposals.

NOTE Also offered online. Consult Arts and Science Online, Learning Hours may vary.

**Learning Hours:** 120 (36 Lecture, 12 Group Learning, 12 Online Activity, 60 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 244 Economics of Indigenous Communities Units: 3.00**

An economic critique of policies past and present with regard to First Nations, Inuit, and Métis peoples living in Canada, with reference to relevant cultural, historic, geographic, and governance contexts. In some years, material may be more comparative and international in scope.

**Learning Hours:** 120 (null324, 12 Group Learning, 48 Online Activity, 36 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 250 Introduction to Statistics Units: 3.00**

Statistical methods as used in economics. This course introduces statistical hypothesis testing and covers basic methods as far as linear regression analysis.

NOTE A grade of C in this course is required as a prerequisite for ECON 351.

**Learning Hours:** 120 (36 Lecture, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite ECON 110 or (ECON 111 and ECON 112) or (COMM 171 and COMM 172). Corequisite (MATH 120 or MATH 121 or [MATH 123 and MATH 124] or MATH 126). Exclusion BIOL 243; CHEE 209; COMM 162; GPHY 247; KNPE 251; NURS 323; POLS 285; PSYC 202; SOCY 211; STAM 200; STAT 263; STAT 367.

**Offering Faculty:** Faculty of Arts and Science

**ECON 255 Introduction to Mathematical Economics Units: 3.00**

An introduction to the use of mathematics in economic analysis. The first part of the course will concentrate on techniques for constrained and unconstrained optimization, as applied to problems of firm and consumer behaviour. This will lead to the interpretation of Lagrange multipliers as shadow prices. The second part of the course will show how matrix algebra may be used to study problems of production and allocation in interdependent economies.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite (ECON 110 or [ECON 111 and ECON 112] or [COMM 171 and COMM 172]) and (MATH 120 or MATH 121 or [MATH 123 and MATH 124] or MATH 126 or [APSC 171 and APSC 172] or COMM 161).

**Offering Faculty:** Faculty of Arts and Science

**ECON 261 Canadian Labour Relations Units: 3.00**

An analysis of the Canadian labour relations system in an economic setting. The socio-economic institutional framework of the industrial and collective bargaining system in Canada provides the background for an analysis of some major emerging issues, such as white collar unionism, unions in the public sector, the public interest in emergency disputes, and the impact of technological change.

**Learning Hours:** 120 (36 Lecture, 9 Group Learning, 75 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 262 Labour Market and Gender Differences Units: 3.00**

A Canadian perspective on labour market theories, trends, policies and the analysis of differences by gender in labour demand, labour supply, and wages.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 280 Population and Economic Change Units: 3.00**

An examination of the interrelationships between changes in the size, composition and distribution of population and changes in the economy. Application is made of some elementary concepts of economic theory and some basic techniques of demographic analysis are introduced. Illustrations are drawn from both the Canadian and the international settings.

**Learning Hours:** 120 (12 Lecture, 24 Group Learning, 36 Online Activity, 48 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 290 Environmental Economics and Assessment Units: 3.00**

An examination of the economic principles and practices for using environmental resources such as air, water, and natural environments. The economically optimal use of these resources is contrasted with actual uses in modern economies. Government policies are examined in theory and in practice. Cost benefit analysis is presented as a technique for evaluating public sector projects using environmental resources.

**Learning Hours:** 120 (36 Lecture, 18 Group Learning, 66 Private Study)

**Requirements:** Prerequisite ECON 110 or ECON 111 or (COMM 171 and COMM 172).

**Offering Faculty:** Faculty of Arts and Science

**ECON 310 Microeconomic Theory II Units: 3.00**

A rigorous examination of the central core of microeconomic theory. Consumer demand, the theory of production, product and factor markets, general equilibrium and some aspects of welfare economics are covered. The emphasis is on techniques of analysis.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite (A minimum grade of a C in ECON 212) and ECON 255.

**Offering Faculty:** Faculty of Arts and Science

**ECON 320 Macroeconomic Theory II Units: 3.00**

An advanced study of the determinants of aggregate demand and the structure of Keynesian and new classical models. Policy issues covered include crowding out, choice of monetary policy instruments, and monetary policy and the exchange rate.

**Learning Hours:** 120 (30 Lecture, 6 Group Learning, 6 Online Activity, 78 Private Study)

**Requirements:** Prerequisite (A minimum grade of a C in ECON 222) and ECON 255.

**Offering Faculty:** Faculty of Arts and Science

**ECON 322 Financial Markets and Risk Management Units: 3.00**

An in-depth coverage of portfolio selection theory, performance evaluation and derivative pricing theory. Portfolio risk management and hedging are introduced. Discussions on widely used derivative products including futures and options. Students will be exposed to the most recent developments in financial markets.

**Learning Hours:** 120 (36 Lecture, 12 Group Learning, 72 Private Study)

**Requirements:** Prerequisite ECON 212 and (ECON 250 or STAT 263 or COMM 162) and (MATH 120 or MATH 121 or [MATH 123 and MATH 124] or MATH 126 or COMM 161). Exclusion COMM 324.

**Offering Faculty:** Faculty of Arts and Science

**ECON 325 International Trade Policy Units: 3.00**

An introduction to the theory of comparative advantage followed by a study of trade policies in developed and developing countries including tariffs and quotas, licensing arrangements, anti-dumping and safeguard mechanisms, domestic content rules and other non-tariff barriers, and multilateral arrangements.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 212.

**Offering Faculty:** Faculty of Arts and Science

**ECON 331 Economic History of North America to 1865 Units: 3.00**

Uses the methods of economic analysis to examine the main features of the development of Canada before Confederation and the United States through the Civil War.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 212.

**Offering Faculty:** Faculty of Arts and Science

**ECON 332 Economic History of North America since 1865 Units: 3.00**

The development of the economies of Canada from Confederation and the U.S. since the Civil War. A comparative approach to the development of the two economies is taken.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 212.

**Offering Faculty:** Faculty of Arts and Science

**ECON 348 Law and Economics Units: 3.00**

Costs and benefits of legal rules. Among the topics covered are: the justification, acquisition, scope and taking by the state of property rights, the enforcement of and remedies for breach of contract, the assignment of liability in traffic accidents and harm from dangerous products, the costs of litigation and the optimal severity of punishment for crime with special reference to the death penalty.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 212.

**Offering Faculty:** Faculty of Arts and Science

**ECON 351 Introductory Econometrics Units: 3.00**

Estimation and inference in multivariate econometric models. Emphasizes understanding of methods and their properties as distinct from formal theoretical development. Practical tools for preparing and analyzing data with appropriate models are taught using econometric software.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite (A minimum grade of a C in [ECON 250 or STAT 263 or COMM 162]) and (MATH 120 or MATH 121 or [MATH 123 and MATH 124] or MATH 126 or COMM 161). Corequisite ECON 255. Exclusion STAT 361.

**Offering Faculty:** Faculty of Arts and Science

**ECON 354 Computational Methods in Economics and Finance Units: 3.00**

An introduction to numerical methods as used in economics, finance, and related fields. Topics include optimization, non-linear systems, numerical approximation, and simulation. Includes a major project where students implement economic models or replicate work found in the literature.

**Learning Hours:** 120 (36 Lecture, 18 Group Learning, 66 Private Study)

**Requirements:** Prerequisite ECON 255. Corequisite (ECON 250 or STAT 263 or COMM 162). Note Programming experience is recommended but not required. Students with a strong math or computing background can contact the Department for permission to enrol.

**Offering Faculty:** Faculty of Arts and Science

**ECON 360 Labour Economics Units: 3.00**

An analytical course covering topics in labour supply analysis, the economics of human capital, labour demand, the operation of labour markets, the economic behaviour and effect of unions, and selected aspects of wage structure.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 212.

**Offering Faculty:** Faculty of Arts and Science

**ECON 361 Income Distribution and Problems of Inequality Units: 3.00**

A review of theories of the principal determinants of the distribution of income and wealth including labour supply, life-cycle savings, ability and investment in human capital, discrimination, intergenerational transfer mechanisms. Also examined are the distributional aspects of government tax transfer and social security programs.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 212.

**Offering Faculty:** Faculty of Arts and Science

**ECON 370 Urban and Regional Economics Units: 3.00**

Topics vary from year to year, reflecting the interests of students and the instructor. One-third of the course is devoted to spatial theory and two-thirds to the application of economic theory to such problems as optimal city size, urban public finance, pollution and aesthetics, and housing, transportation and poverty problems in the urban setting.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 212.

**Offering Faculty:** Faculty of Arts and Science

**ECON 371 Economics of Regulation Units: 3.00**

Examines regulated industries such as electrical utilities, communication, transportation and agriculture. Addresses traditional questions relating to pricing rules and some recent work in political economy that attempts to explain why society has adopted the particular form of intervention that has occurred.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 212.

**Offering Faculty:** Faculty of Arts and Science

**ECON 390 Natural Resource Economics Units: 3.00**

The study of the exploitation and conservation of natural resources such as fisheries, forestry, minerals and energy, and the implications for public policy using tools of economic analysis. Issues relating to the quality of the environment and role of natural resources in the growth and development of the economy are also emphasized.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 212.

**Offering Faculty:** Faculty of Arts and Science

**ECON 391 Topics in Environmental Economics Units: 3.00**

This course provides a solid understanding of the economic causes and consequences of environmental problems and suggests practical solutions. Microeconomic analysis is used to help address a range of issues related to the environment. Likely topics include global environmental problems, sustainable development, environmental law, strategic models of regulation, environmental ethics, and bioeconomic models.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 212.

**Offering Faculty:** Faculty of Arts and Science

**ECON 411 Topics in Microeconomic Theory Units: 3.00**

Content varies from year to year. Game theory, risk, and externalities are among the topics covered in recent years.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 310.

**Offering Faculty:** Faculty of Arts and Science

**ECON 421 Topics in Macroeconomics Theory Units: 3.00**

An advanced discussion of selected topics in macroeconomic theory, policy, and evidence. Analysis uses: two-period models; linear, rational expectations models; overlapping generations models; and the neoclassical growth model. These methods are applied to such topics as: asset-pricing; hyperinflation; exchange-rate overshooting; Ricardian equivalence; international evidence on sources of economic growth. Detailed reference is made to empirical evidence.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 310 and ECON 320.

**Offering Faculty:** Faculty of Arts and Science

**ECON 422 Monetary Economics Units: 3.00**

Topics in monetary theory and policy, depending upon the interests of the instructor and students. Examples include the foundations of monetary theory; money supply and demand; portfolio choice; monetary aspects of the balance of payments; money and economic growth; financial markets; the term structure of interest rates.

**Learning Hours:** 120 (36 Lecture, 6 Online Activity, 78 Private Study)

**Requirements:** Prerequisite ECON 310.

**Offering Faculty:** Faculty of Arts and Science

**ECON 423 Topics in Financial Economics Units: 3.00**

Selected topics in financial economics. Topics may include: the microeconomics of banking; pricing of financial instruments; risk management and financial markets infrastructure; financial choices under uncertainty and general equilibrium. Students are directed to the undergraduate website for a detailed description yearly.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 310. Corequisite ECON 351.

**Offering Faculty:** Faculty of Arts and Science

**ECON 425 International Trade Theory and Policy Units: 3.00**

A rigorous treatment of the major issues in international trade theory, using mainly geometrical tools. There is also emphasis on empirical testing of various hypotheses. The major topics covered are the determinants of international trade patterns, commercial policy issues, trade and economic growth and regional integration.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 6 Online Activity, 72 Private Study)

**Requirements:** Prerequisite ECON 310.

**Offering Faculty:** Faculty of Arts and Science

**ECON 426 International Macroeconomics Units: 3.00**

The study of international capital flows, sovereign debt, and international risk-sharing; real exchange rates and international goods pricing; topics in international finance such as exchange-rate modeling and speculative attacks; and policy topics such as fiscal and monetary policy effects and exchange-rate regime choice.

**Learning Hours:** 120 (36 Lecture, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite ECON 310 and ECON 320.

**Offering Faculty:** Faculty of Arts and Science

**ECON 430 Issues in Economic History Units: 3.00**

An advanced course in economic history that explores a selection of topics debated in the literature. An emphasis is placed on the use of economic analysis to deal with historical issues. The topics vary from year to year and usually concern mainly, but not exclusively, North America. Offered concurrently with ECON 831.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 231 or ECON 232 or ECON 331 or ECON 332. Corequisite (ECON 310 and ECON 351).

**Offering Faculty:** Faculty of Arts and Science

**ECON 435 Development Economics Units: 3.00**

Microeconomic issues: land, labor, credit, and insurance markets; duality; alternate views of the role and evolution of non-market institutions in the development process. Macroeconomic issues: urban migration; inequality and development; population growth and technical change; internal factor accumulation versus TFP growth. Offered concurrently with ECON 835.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 310 and permission of the Department. Corequisite ECON 351.

**Offering Faculty:** Faculty of Arts and Science

**ECON 437 Cost-Benefit Analysis Units: 3.00**

A course covering the techniques and applications of cost-benefit analysis and project evaluation. Topics include the foundations of cost-benefit analysis; investment decision rules; the social discount rate; risk and uncertainty; and the shadow pricing of inputs. Objectives such as income distribution and macro-economic goals are also considered.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 255 and ECON 310 and permission of the Department.

**Offering Faculty:** Faculty of Arts and Science

**ECON 440 Public Economics Units: 3.00**

The study of public goods, redistribution of income, and taxation, with emphasis on efficiency and equality as criteria for decision-making in the public sector.

**Learning Hours:** 120 (36 Lecture, 6 Online Activity, 78 Private Study)

**Requirements:** Prerequisite ECON 310.

**Offering Faculty:** Faculty of Arts and Science

**ECON 442 Topics in Public Economics Units: 3.00**

Selected topics in the theory of public economics and related policy questions. Content varies from year to year. Topics may include: the role of asymmetric information in public economics, tax policy, design of redistributive programs, fiscal federalism, and selected aspects of Canadian public policy. Students are directed to the undergraduate website for a detailed description.

**Learning Hours:** 120 (36 Lecture, 84 Private Study)

**Requirements:** Prerequisite ECON 310.

**Offering Faculty:** Faculty of Arts and Science



**ECON 443 Issues in Microeconomics Policy Units: 3.00**

Selected topics in microeconomic policy. Topics may include: climate change, health economics, national security (defense economics), globalization and/or regional development, and demographic change. Students are directed to the undergraduate website for a detailed description.

**Learning Hours:** 120 (36 Lecture, 18 Group Learning, 66 Private Study)

**Requirements:** Prerequisite ECON 310. Exclusion ECON 443 (Topic Title: Principles Neuroeconomics); PSYC 398 (Topic Title: Behavioural Neuroeconomics).

**Offering Faculty:** Faculty of Arts and Science

**ECON 445 Industrial Organization and Public Policy Units: 3.00**

An analysis of industry structure, conduct and performance in the Canadian economy, including the major features and current issues of competition policy.

**Learning Hours:** 120 (null36, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 310.

**Offering Faculty:** Faculty of Arts and Science

**ECON 450 Topics in Advanced Econometrics Units: 3.00**

Selected topics in econometric methods and their application. Topics may include machine learning, autoregressive models, vector autoregression, unit roots and cointegration, and both cross-section and panel data estimation techniques. Students are directed to the undergraduate website for a detailed description.

**Learning Hours:** 120 (36 Lecture, 6 Group Learning, 78 Private Study)

**Requirements:** Prerequisite ECON 351.

**Offering Faculty:** Faculty of Arts and Science

**ECON 452 Applied Econometrics Units: 3.00**

Emphasizes problems in specifying and estimating econometric models, methods available for detecting and handling these problems, and economic applications. Extensive use of matrix algebra.

**Learning Hours:** 120 (36 Lecture, 12 Group Learning, 72 Private Study)

**Requirements:** Prerequisite ECON 255 and (ECON 351 or STAT 361).

**Offering Faculty:** Faculty of Arts and Science

**ECON 455 Mathematical Economics Units: 3.00**

Applications of mathematics in economic analysis. Topics covered will generally include a review of optimization techniques as applied to consumer and producer theory, comparative statics, the envelope theorem, duality theory, welfare economics and general equilibrium theory. Optimization techniques to be covered will include nonlinear and dynamic programming. Offered concurrently with ECON 855.

**Learning Hours:** 120 (36 Lecture, 12G:72P)

**Requirements:** Prerequisite ECON 255 and ECON 310 and permission of the Department.

**Offering Faculty:** Faculty of Arts and Science

**ECON 480 Seminar In Microeconomics I Units: 3.00**

Series of seminar courses on microeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 481 Seminar In Microeconomics II Units: 3.00**

Series of seminar courses on microeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 482 Seminar In Microeconomics III Units: 3.00**

Series of seminar courses on microeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 483 Seminar In Microeconomics IV Units: 3.00**

Series of seminar courses on microeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 484 Seminar In Microeconomics V Units: 3.00**

Series of seminar courses on microeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 485 Seminar In Microeconomics VI Units: 3.00**

Series of seminar courses on microeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 486 Seminar In Microeconomics VII Units: 3.00**

Series of seminar courses on microeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 487 Seminar In Microeconomics VIII Units: 3.00**

Series of seminar courses on microeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 488 Seminar In Microeconomics IX Units: 3.00**

Series of seminar courses on microeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 489 Seminar In Microeconomics X Units: 3.00**

Series of seminar courses on microeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 490 Seminar In Macroeconomics I Units: 3.00**

Series of seminar courses on macroeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 491 Seminar In Macroeconomics II Units: 3.00**

Series of seminar courses on macroeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 492 Seminar In Macroeconomics III Units: 3.00**

Series of seminar courses on macroeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 493 Seminar In Macroeconomics IV Units: 3.00**

Series of seminar courses on macroeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Medial students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 494 Seminar In Macroeconomics V Units: 3.00**

Series of seminar courses on macroeconomic topics. Evaluation based on presentations, formal/informal participation and written papers. Offerings vary from year to year with staff availability. Topics announced in advance of course selection and available on the Undergraduate webpage.

NOTE Fourth year ECON Media students with fewer than 30.0 ECON units and fourth year APEC students without ECON 320 should contact the department before May 1 to obtain permission to register in this course.

**Learning Hours:** 120 (18 Seminar, 18 Group Learning, 12 Individual Instruction, 72 Private Study)

**Requirements:** Prerequisite Level 4 or above and a (cumulative GPA of 1.90 or higher) and a (minimum GPA of 2.60 in 30.0 units of ECON) and (ECON 310; ECON 320; ECON 351). Exclusion ECON 480-499.

**Offering Faculty:** Faculty of Arts and Science

**ECON 590 Economics Thesis Units: 6.00**

Optional for those in the B.A.(Honours) program with a major concentration in Economics or Applied Economics. The thesis is a major research paper to be undertaken with supervision of a faculty adviser. The thesis proposal should be presented to the Department by 31 October in the graduating year and a completed thesis must be submitted to the Department by the end of the Winter Session in the graduating year.

**Learning Hours:** 240 (48 Individual Instruction, 192 Private Study)

**Requirements:** Prerequisite Level 4 or above and registration in an (ECON or APEC Plan) and permission of the Department. Note Enrollment is limited.

**Offering Faculty:** Faculty of Arts and Science

**ECON 594 Independent Study Units: 3.00**

**Offering Faculty:** Faculty of Arts and Science

**ECON 595 Independent Study Units: 6.00**

**Offering Faculty:** Faculty of Arts and Science

**ECON 596 Independent Study Units: 12.00**

**Offering Faculty:** Faculty of Arts and Science

**ECON 597 Independent Study Units: 18.00**

**Offering Faculty:** Faculty of Arts and Science

**Politics, Philosophy, and Economics (PPEC)**

**PPEC 200 Introduction to the Study of Politics, Philosophy and Economics Units: 3.00**

This course will emphasize the analysis of conceptual complementarities, the assessment of arguments, and the application of principles in factual contexts that are the focus of study within the disciplines of Politics, Philosophy and Economics.

**Learning Hours:** 120 (24 Lecture, 12 Group Learning, 84 Private Study)

**Requirements:** Prerequisite 12.0 units from (ECON 110; [ECON 111 and ECON 112]; POLS 110; PHIL at the 100-level).

**Offering Faculty:** Faculty of Arts and Science

**PPEC 400 Research Seminar in Politics, Philosophy and Economics Units: 3.00**

Politics, Philosophy and Economics approach problems from discipline specific perspectives, but the questions asked have fundamental similarities. In this course students will be exposed to research methods from all three different disciplines, while completing a research intensive project. Peer review and presentation skills will be emphasized.

**Learning Hours:** 120 (12 Lecture, 12 Seminar, 12 Group Learning, 84 Private Study)

**Requirements:** Prerequisite Level 4 or above and registration in the PPEC Specialization Plan and a minimum Plan GPA of 2.60 and permission of the Department.

**Offering Faculty:** Faculty of Arts and Science