# **ECON – ECONOMICS**

#### **ECON 101**

## Introduction to Microeconomics 3 Credits Weekly (3-0-0)

This course provides an introduction to supply and demand analysis, the theory of production, costs, and price determination under competitive and non-competitive market conditions. Emphasis is given to the Canadian Economy.

#### **ECON 102**

## Introduction to Macroeconomics

## 3 Credits Weekly (3-0-0)

Following a brief introduction to the discipline of economics, this course provides an introductory investigation of national income determinations, monetary and banking systems, and fiscal and monetary policies. Contemporary problems of unemployment, inflation, economic growth, exchange rates and international trade are analyzed. Emphasis is given to Canadian issues.

#### **ECON 212**

## **Economic Aspects of the European Union**

## 3 Credits Weekly (3-0-0)

This course focuses on the study of economic policies in the European Union (EU). Though the ideas of trade liberalization and economic integration are as old as economics itself, the ongoing process of integrating Europe is one of the most exciting experiences in human history. The European experience of economic, political, legal, and social integration is a unique opportunity to learn how these processes work and what their dangers are. This course concerns the economic foundations of the Union, as well as current issues.

Prerequisites: Minimum grade of C- in ECON 101 and ECON 102.

#### **ECON 213**

## **Introduction to Economics of Developing Countries**

## 3 Credits Weekly (3-0-0)

This course is a survey of case studies from developing countries that focuses on the major approaches to, and problems of, economic development. It emphasizes issues relating to the concept and history of development; development strategies; poverty; population growth; trade, growth, macroeconomic management and globalization; role of institutions in development; linkages between environment and development; savings and investment; and foreign aid. *Prerequisites: Minimum grade of C- in ECON 102.* 

### **ECON 220**

### The Economics of Gender

#### 3 Credits Weekly (3-0-0)

This course is an analysis of general gender economic issues which can impact economic development around the world. The topics to be discussed will include educational achievement, labour market participation, earnings, socio-economic policies, and accessibility to technology based on different gender identities.

Prerequisites: A minimum grade of C- in ECON 102.

#### **ECON 255**

# Introduction to Data Wrangling: Collecting, Cleaning, and Presenting Data 3 Credits (0-3-0)

This course is an introduction to data analysis: finding, collecting, cleaning, exploring, visualizing, and presenting data. Students will apply the methods learned in this course to describe, interpret, and analyze practical economic problems. The course uses the R software for all purposes.

Prerequisites: A minimum grade of C- in ECON 101 or ECON 102.

#### **ECON 261**

#### **Introduction to Agricultural Economics**

3 Credits Weekly (3-0-0)

This course introduces students to the basic economic concepts and issues related to agriculture and food, especially economic forces influencing the decisions of producers, consumers, and marketers of food, fiber, and other agricultural products. The interaction of agricultural production with environment in relation to sustainability and regional differences will also be addressed.

Prerequisites: A minimum grade of C- in ECON 101.

#### **ECON 281**

## Intermediate Microeconomics

## 3 Credits Weekly (3-0-0)

Students explore topics such as the theory of consumer behavior; the theory of production and cost; and price and output determination under competition, monopoly, and other market structures.

Prerequisites: A minimum grade of C- in ECON 101.

#### **ECON 282**

## Intermediate Macroeconomics

### 3 Credits Weekly (3-0-0)

Students explore topics such as models of price, interest rate, output, and employment determination; the impact of fiscal, monetary, and supply shocks; open economy macroeconomics with fixed and flexible exchange rates, and prices as well as international capital mobility.

Prerequisites: Minimum grades of C- in ECON 101 and ECON 102.

#### **ECON 289**

#### **Introduction to Mathematical Economics**

## 3 Credits Weekly (3-0-0)

This course introduces students to a mathematical framework for economic analysis. It covers the fundamental techniques of functions, matrix algebra, and bivariate differentiation, as well as their application to economic analysis. Note: This course can fulfill the arts credit requirement of the Bachelor of Arts program and the science credit requirement of the Bachelor of Science program.

Prerequisites: A minimum grade of C- in ECON 101.

#### **ECON 290**

### Economics at Work: Reasoning and Writing in Economics

## 3 Credits Weekly (3-0-0)

Students review the tools of economic reasoning and use them to analyze a variety of micro- or macro-economic issues from an individual's perspective. Instruction emphasizes high student engagement both in class and with home assignments. Reading and writing economics materials are both means and ends of this course.

Prerequisites: Minimum grade of C- in 6 ECON (p. 1) credits.

## **ECON 299**

#### **Quantitative Methods in Economics**

## 3 Credits Weekly (3-0-0)

This course deepens the study of the mathematical and statistical concepts most frequently used in Economics. Students review and learn mathematical techniques and apply them to economic problems, in preparation for higher-level Economics courses. The first part of the course reviews calculus with one and two variables; the second half reviews statistical concepts used in Econometrics. Note: This course can be used to fulfill the arts credit requirements of the Bachelor of Arts and the science credit requirement of the Bachelor of Science.

Prerequisites: Minimum grades of C- in ECON 101, one of ECON 289 or MATH 114, and one of STAT 151 or STAT 161.

## **Canadian Monetary Policy**

## 3 Credits Weekly (3-0-0)

Monetary policy is a complex process of decision making. Such policy requires measuring the existing state of the Canadian economy, forecasting various macroeconomic variables, and understanding how variables such as interest rates, exchange rates, budget deficits, and trade deficits influence the inflation rate. In this course, students will learn how to assess such variables by simulating the role of advisors to the Bank of Canada on monetary policy. A small number of students taking this course may be offered the extra-curricular chance to participate in the subsequent round of Bank of Canada Governor's Challenge competition.

Prerequisite: Minimum grades of C- in ECON 282 and ECON 399; ECON 399 may be taken as a co-requisite with permission of the department.

#### **ECON 319**

## **Contemporary Canadian Economic Issues**

#### 3 Credits Weekly (0-0-3)

This course examines contemporary Canadian economic issues in relation to macroeconomic performance, monetary and fiscal policies, trade liberalization, environmental management and policies, industrial policies, social policies and regional development. The debates and policies related to contemporary economic aspects of these issues are discussed.

Prerequisites: Minimum grade of C- in ECON 101 and ECON 102.

#### **ECON 323**

#### **International Economics**

#### 3 Credits Weekly (3-0-0)

This course examines the principles underlying the international economy in both trade and finance. Emphasis is placed on the determination of trade patterns, comparative advantage, trade and tariffs, and the macroeconomic effects of exchange rate changes. Note: Students who have taken ECON 421 or ECON 422 for credit cannot receive credit for this course.

Prerequisites: Minimum grades of C- in ECON 101 and ECON 102.

#### **ECON 335**

## **Urban Economics**

### 3 Credits Weekly (3-0-0)

This course explores how economic forces: influence development of cities in spatial, social, and economic dimensions; cause cities to grow or shrink; affect urban problems such as poverty, crime, and congestion; make urban housing markets work; and shape taxation and spending policies to promote urban sustainability.

Prerequisites: Minimum grade of C- in ECON 101.

### **ECON 341**

### **Money and Banking**

## 3 Credits Weekly (3-0-0)

This course analyzes the role of money and credit in the exchange process. Topics include the savings - investment process, commercial banking, financial intermediaries, financial markets, central banking, and regulations of financial institutions.

Prerequisites: A minimum grade of C- in ECON 102.

#### **ECON 342**

#### Introduction to Financial Economics

#### 3 Credits Weekly (3-0-0)

This course provides an overview of the foundational theories in financial economics and their practical applications. It introduces key concepts related to financial markets and risk management from an economics perspective, and serves as a crucial precursor to advanced-level courses in Financial Economics. The primary goal is to equip students with insights into the decision-making processes of individuals, businesses, and governments regarding financial resources and the consequential impact on resource allocation. Recent news related to ongoing economic and financial issues are incorporated into the course materials to enhance students' understanding of theoretical concepts. *Prerequisites: Minimum grades of C- in ECON 101 and either MATH 114 or ECON 289.* 

#### **ECON 344**

## **Fundamentals of Policy Analysis**

#### 3 Credits Weekly (3-0-0)

This course applies economic concepts and techniques to practical policy problems that governments face, including the provision of public goods and the regulation of private individuals and businesses. Students will learn how to conduct different types of economic analyses that assist governments in deciding when and where to address a problem and how to choose between different solutions. This course provides students with an entry point to the profession of policy analysis. Note: Students can only receive credit for one of ECON 344 or POLS 344. Prerequisites: A minimum grade of C- in ECON 101 or consent of the department; POLS 244 is recommended for all students taking this course.

#### **ECON 345**

### **Global Economics**

#### 3 Credits Weekly (3-0-0)

This course aims to analyze historical and current issues surrounding globalization and regional economic integration among nations. The discussions are based on a critical review of empirical evidence and applications of theory and policies worldwide. Topics to be covered include causes and consequences of financial crises, the establishment and the role of international economic institutions, analysis of trade agreements, regional trade strategies, and the impact of globalization. *Prerequisites: A minimum grade of C- ECON 102.* 

#### **ECON 350**

## **Economics of Public Expenditure**

## 3 Credits Weekly (3-0-0)

This course analyzes public expenditure policies and other issues involved in the provision of public services. The key topics include public goods, externalities, public choice, fiscal federalism, healthcare, education, and public pensions.

Prerequisites: A minimum grade of C- in ECON 101.

### **ECON 353**

## **Taxation Policy and Structure**

#### 3 Credits Weekly (3-0-0)

This course introduces students to the basic structure of a tax system and various tax policy issues. Particular attention is paid to the Canadian tax structure and its role in attaining certain goals of society. The key concepts in this course include tax incidence, economic effects of taxes, and tax policy design.

Prerequisites: A minimum grade of C- in ECON 101.

## **Economics of Project Evaluation**

### 3 Credits Weekly (3-0-0)

This course covers the use of cost-benefit analysis and other economic methods in evaluating private and public investment projects with examples from transportation, river basin management, electrical generation, and oil and gas.

Prerequisites: Minimum grade of C- in ECON 101.

#### **ECON 357**

#### **Topics in Applied Economics**

#### 3 Credits Weekly (3-0-0)

This course focuses on the economic aspects and related policy issues of selected areas such as; health and health care, labour, sports, and law. Topics vary and are announced prior to registration. Consult with faculty members in Economics for details regarding current offerings. *Prerequisites: Minimum grade of C- in ECON 101*.

#### **ECON 365**

#### **Resource Economics**

#### 3 Credits Weekly (3-0-0)

This course examines the issues involved in the production of exhaustible and renewable natural resources, including exploration, extraction, and taxation; scarcity and pricing; and contemporary Canadian resource policy issues.

Prerequisites: A minimum grade of C- in ECON 101.

### **ECON 366**

#### **Energy Economics**

#### 3 Credits Weekly (3-0-0)

This course examines the economics of producing and consuming energy, pricing, role in economic growth, energy sources and markets, the role of government, regulation and other energy policy issues.

Prerequisites: A minimum grade of C- in ECON 101.

#### **ECON 369**

## **Economics of the Environment**

### 3 Credits Weekly (3-0-0)

This course examines economic growth and the deterioration of the environment, types and causes of environmental deterioration, theory, policy, and measurement relating to environmental deterioration, and current Canadian environmental topics.

Prerequisites: A minimum grade of C- in ECON 101.

### **ECON 373**

## **Industrial Organization**

### 3 Credits Weekly (3-0-0)

This course presents a survey of the theories of behaviour and performance of firms under different market structures, game-theoretical concepts applied to the study of strategic behaviour in the market, case studies, and Canadian antitrust policy and practice.

Prerequisites: Minimum grade of C- in ECON 281 and either MATH 114 or ECON 289.

#### **ECON 384**

### Microeconomic Theory

### 3 Credits Weekly (3-0-0)

This course examines extensions and applications of microeconomic topics such as inter-temporal choice, uncertainty, game theory, externalities, public goods, asymmetric information, and general equilibrium. Recommended to students who wish to deepen their understanding in microeconomic theory and analytical skills in using microeconomic models.

Prerequisites: Minimum grade of C- in ECON 281 and either MATH 114 or ECON 289.

#### **ECON 385**

### **Macroeconomic Theory**

#### 3 Credits Weekly (3-0-0)

Building on Intermediate Macroeconomics, students examine government budget constraint and public debt, neoclassical growth theories, money supply, and theories of aggregate consumption, investment, and money demand.

Prerequisites: Minimum grades of C- in ECON 281 and ECON 282.

#### **ECON 389**

#### **Mathematical Economics**

## 3 Credits Weekly (3-0-0)

This course focuses on mathematical techniques used to set and solve economic problems. Topics include matrix algebra applied in Econometrics, multivariate nonlinear optimization with equality and inequality constraints (first- and second-order conditions), and comparative static analysis. Note: This course can be used to fulfill the arts credit requirements of the Bachelor of Arts and the science credit requirement of the Bachelor of Science.

Prerequisites: A minimum grade of C- in the following: 1) ECON 281 or ECON 282, 2) ECON 289 or both MATH 114 and MATH 120, and 3) STAT 151 or STAT 161.

#### **ECON 398**

#### Independent Study

### 3 Credits Total (0-0-45)

This course permits an intermediate level student to work with an instructor to explore specific economic topics in a certain field of economics through directed reading and research using primary and secondary sources.

Prerequisites: Department consent required.

## **ECON 399**

### **Introductory Econometrics**

#### 3 Credits Weekly (0-3-0)

This course provides an elementary treatment of major topics in econometrics with emphasis on applied regression methods, econometric model building and applications, introduction to, and practice of empirical research methods; identifying topics, collecting data, and writing a research report. Note: This course can be used to fulfill the arts credit requirements of the Bachelor of Arts and the science credit requirement of the Bachelor of Science.

Prerequisites: A minimum grade of C- in ECON 299.

#### **ECON 401**

## **Field Placement**

### 3 Credits Weekly (6-0-0)

In this course, the students are assigned to a public, private, or non-profit organization where they apply their knowledge and skills in research, evaluation, management or analytical aspects of a project. Note: This course does not fulfill the 400-level requirement for the major and minor. *Prerequisites: Minimum grade of C- in ECON 299 and consent of the department.* 

#### **ECON 414**

### **Development Economics**

## 3 Credits Weekly (3-0-0)

This course focuses on economic models of growth and development in developing countries. Topics include poverty and inequality, population dynamics, the role of agriculture, industry, saving and investment, fiscal and macro policies, international trade and globalization in structural transformation of developing countries as well as the various approaches to development planning.

Prerequisites: Minimum grade of C- in ECON 281 and ECON 282.

#### International Trade

### 3 Credits Weekly (0-0-3)

The course focuses on: nature and relevance of international trade; early trade doctrines; the theory of comparative advantage; classical and modern approaches and empirical evidence for them; new approaches to the pure theory of international trade; economic growth and international trade; market imperfections and trade; commercial policy; economic integration; and the gains from trade.

Prerequisites: Minimum grades of C- in ECON 281, and in either MATH 114 or ECON 289.

#### **ECON 422**

## **International Payments**

### 3 Credits Weekly (0-0-3)

This course examines these macroeconomic topics: the types of international transactions, macroeconomics in an open economy, exchange rates, balance of payments adjustments, and issues within the international monetary system.

Prerequisites: Minimum grades of C- in ECON 281, ECON 282 and in either MATH 114 or ECON 289.

#### **ECON 441**

### **Monetary Theory and Policy**

## 3 Credits Weekly (0-0-3)

In this course, students examine formal modeling of money and recent developments in monetary economics, including inflation tax and the optimum quantity of money. Key topics include term structure of interest rates, money and economic activity, rules versus discretion in monetary policy, and the role of financial deregulation.

Prerequisites: Minimum grade of C- in ECON 281, ECON 282 and in either MATH 114 or ECON 289.

#### **ECON 442**

#### **Economics of Financial Markets**

### 3 Credits Weekly (0-0-3)

The central topics covered in this course include the measurements of risk, hedging and speculation, market microstructure, asset pricing and market equilibrium.

Prerequisites: Minimum grade of C- in ECON 281, in either STAT 151 or STAT 161, and in either MATH 114 or ECON 289.

### **ECON 443**

## **Topics in Financial Economics**

#### 3 Credits Weekly (3-0-0)

This course is devoted to the detailed study of a single topic. The content of the course will depend on the topic area. Students can take this course up to two times, provided the course topic is different.

Prerequisites: A minimum grade of C- in FNCE 301 or a minimum grade of C- in ECON 442.

#### **ECON 444**

### **Empirical Finance**

#### 3 Credits Weekly (3-0-0)

This course provides a thorough investigation into applying empirical methods and economic theory to analyze financial data. Students will develop proficiency in using econometric techniques and statistical tools to construct financial models, estimate and interpret financial data, assess volatility, manage risks, and test financial theories. The emphasis is on practical applications, case studies, and utilizing programming languages like R for empirical analysis. Through practical exercises and projects, students will acquire the skills required to conduct empirical research in finance and make informed decisions in professional contexts.

Prerequisites: Minimum grade of C- in ECON 399 and one of ECON 341, ECON 342, or FNCE 301.

#### **ECON 445**

### Derivatives: Fundamentals of Futures and Options Markets 3 Credits Weekly (3-0-0)

This advanced course provides students with a comprehensive exploration of derivative securities, focusing specifically on futures and options contracts. Topics covered include the structure of futures and options markets, pricing models, trading strategies, risk analysis, and the role of derivatives in portfolio management. Emphasis will be placed on real-world applications and case studies to enhance practical understanding and decision-making skills.

Prerequisites: A minimum grade of C- in one of ECON 341, ECON 342 or FNCE 301.

#### **ECON 455**

#### **Topics in Econometrics**

## 3 Credits Weekly (0-3-0)

This course focuses on selected contemporary topics in Econometrics. Students undertake a detailed analysis of a specific topic. The instructor chooses the topic in any given semester. Students can take this course up to two times, provided the course topic is different.

Prerequisites: A minimum grade of C- in ECON 399.

#### **ECON 467**

### **Environmental and Natural Resource Policy**

### 3 Credits Weekly (0-0-3)

The course focuses on the relationships between economic activities, environment and ecosystem; designing, implementing, managing and evaluating domestic, regional and global policy issues related to environmental, renewable and non-renewable resources. The course also discusses Canadian environmental problems and critically analyzes the policies used to address those problems.

Prerequisites: Minimum grade of C- in ECON 281, either MATH 114 or ECON 289, and one of ECON 365, ECON 366, or ECON 369.

## **ECON 481**

### **Advanced Microeconomic Theory**

## 3 Credits Weekly (3-0-0)

This honours level course is an advanced microeconomics study of producer and consumer theory, general equilibrium and welfare economics, and selected topics.

Prerequisites: Minimum grade of C- in ECON 384 and ECON 389 or consent of the department.

## **Advanced Macroeconomic Theory**

3 Credits Weekly (3-0-0)

This course introduces major macroeconomic theory models and their implications on macroeconomic policies. Topics covered include theories of business cycles and growth, microfoundations of macro models, government budget constraints, expectations formation, the open economy, and representative agent optimizing models.

Prerequisites: A minimum grade of C- in ECON 385.

#### **ECON 489**

#### **Advanced Mathematical Economics**

3 Credits Weekly (3-0-0)

This course focuses on dynamic models in economics. Topics include economic models based on first- and second-order differential equations, calculus of variations (the Euler sufficient condition), and optimal control theory (the maximum principle); instructors may include other topics, such as difference equations and discrete time optimization. Examples may come from macroeconomics, microeconomics, game theory, resource economics, energy, and other subjects in economics.

Prerequisites: A minimum grade of C- in ECON 389, or both MATH 115 and 6 credits ECON (p. 1), or consent of the department.

#### **ECON 495**

#### **Applied Econometrics**

3 Credits Weekly (0-3-0)

This course covers topics that are beyond the scope of ECON 399, such as panel data models, instrumental variables, limited dependent variables, and simultaneous equations. The learning method is substantially based on computer lab work. The theory behind each econometric method studied in this course is provided only as much as necessary for the sound understanding of the respective method. *Prerequisites: A minimum grade of C- in ECON 399 or STAT 378.* 

#### **ECON 497**

## **Economic Analysis: A Capstone Seminar**

3 Credits Weekly (0-0-3)

Students use their understanding of economic theory and quantitative knowledge to investigate in depth an economic issue. In a structured environment, they learn how to analyze economic problems, find solutions and write reports. They also practice how to formally discuss critique and evaluate other economic reports and publications.

Prerequisites: A minimum grade of C- in ECON 281, ECON 282, and ECON 399. Co-requisites: ECON 399 May be taken as Co-requisite with consent of the department.

#### **ECON 498**

## **Advanced Independent Study**

3 Credits Total (0-0-45)

This course permits a senior-level student to work with an instructor to explore a specific economic topic in depth through directed reading and research using primary and secondary sources.

Prerequisites: Minimum grades of C- in ECON 281, ECON 282, ECON 299, and consent of the department.

#### **ECON 499**

#### **Honours Thesis**

3 Credits Total (0-0-45)

Under the direction of a faculty supervisor registered students conduct a research project culminating in a written Honours Thesis with oral defense. This course is restricted to students in the Honours Economics Program and may only be taken in their final year of the program.

Prerequisites: Department consent required.