

# ECONOMICS (ECON)

## **ECON\*1050 Introductory Microeconomics Summer, Fall, and Winter (LEC: 3) [0.50]**

This course gives students an introduction to the economy including the topics of price determination, market structure and resource allocation, the behaviour of consumers and firms, and market intervention by government. Some of the economic issues addressed may include agricultural price supports, rent control, trade policy, environmental regulation, price discrimination, and taxation.

**Offering(s):** Also offered through Distance Education format.

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

## **ECON\*1100 Introductory Macroeconomics Summer, Fall, and Winter (LEC: 3) [0.50]**

This course looks at the Canadian Economy in terms of aggregate performance and policy; analysis of the determinants of national income, employment and the price level, and the role of government monetary and fiscal policies in improving the rate of economic growth.

**Offering(s):** Also offered through Distance Education format.

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

## **ECON\*2100 Economic Growth and Environmental Quality Fall Only (LEC: 3) [0.50]**

This course examines the implications of economic growth on the quality of the environment, employing the basic principles of economic analysis.

**Prerequisite(s):** ECON\*1050 or FARE\*1040

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

## **ECON\*2310 Intermediate Microeconomics Summer, Fall, and Winter (LEC: 3) [0.50]**

This course is an analysis of the behaviour of households and firms under alternative assumptions and market conditions.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** (ECON\*1050 or FARE\*1040), (1 of IPS\*1500, MATH\*1030, MATH\*1080, MATH\*1200)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

## **ECON\*2410 Intermediate Macroeconomics Summer, Fall, and Winter (LEC: 3) [0.50]**

This course is an analysis of open as well as closed economy models of aggregate spending, output, employment, prices and interest rates under alternative assumptions about the nature of labour, product and financial markets. This includes theories of consumption, investment and money demand.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** ECON\*1100, (1 of IPS\*1500, MATH\*1030, MATH\*1080, MATH\*1200)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

## **ECON\*2650 Introductory Development Economics Fall Only (LEC: 3) [0.50]**

This course introduces students to the economic experience of developing countries, the ways in which economists try to understand it, and the implications for policy. The basic tools of economic analysis as taught in the introductory courses are used to analyse topics that may include theories of growth, trade, education, foreign investment, exchange rates, labour markets, the role of government, environmental sustainability and strategies related to agriculture, population, industry and investment.

**Prerequisite(s):** ECON\*1100 (ECON\*1050 or FARE\*1040)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

## **ECON\*2740 Economic Statistics Fall and Winter (LEC: 3, LAB: 1) [0.50]**

This course is designed to prepare students conceptually and mathematically for (ECON\*2560 or FIN\*2000), Theory of Finance and ECON\*3740, Introduction to Econometrics. Topics include the summation operator, descriptive statistics, frequency distributions, probability and statistical independence, the binomial distribution, algebra of the expectation operator, discrete bivariate distributions, covariance, variance of a linear function of random variables, the normal and t distributions, sampling distributions, point and interval estimation, hypothesis testing and an introduction to ordinary least squares. Additional topics may be included at the instructor's discretion. Examples and assignment questions are drawn from economics and finance.

**Prerequisite(s):** ECON\*1100, (ECON\*1050, or FARE\*1040), (1 of MATH\*1000, MATH\*1030, MATH\*1050, MATH\*1080, MATH\*1200)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

## **ECON\*2770 Introductory Mathematical Economics Fall and Winter (LEC: 3) [0.50]**

This course applies the elements of calculus and matrix algebra to simple microeconomic and macroeconomic problems.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** ECON\*1100, (ECON\*1050, or FARE\*1040), (1 of MATH\*1030, MATH\*1080, MATH\*1200)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

## **ECON\*3100 Game Theory Winter Only (LEC: 4) [0.50]**

The course introduces students to non-cooperative game theory, which is an important method of analysis for economics situations involving small numbers of interacting economic agents. The course is centered on the concept of Nash equilibrium, and applies this equilibrium concept to static and dynamic games with full as well as incomplete information. The purpose of the course is to enable students to take any economic situation, find an economic model (game) that depicts the incentives facing the participants, and analyze the game to predict the behaviour of the economic agents.

**Prerequisite(s):** ECON\*2310, ECON\*2410, (ECON\*2770 or MATH\*1210)

**Restriction(s):** ECON\*3770

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3300 Economics of Health and the Workplace Unspecified (LEC: 3) [0.50]**

This course will introduce students to concepts of health economics with particular relevance to workplace issues. Topics to be covered include the determinants of health, the demand for and supply of health care, the market for health care providers, health insurance, public and private, the role of health insurance in the labour market, whether not having to provide comprehensive health insurance to their workers gives Canadian firms an edge over their American competitors, workplace health risks and their effects on working conditions and salaries, workplace wellness programs and their evaluation, and the analysis of the cost effectiveness of health interventions.

**Prerequisite(s):** ECON\*2310, (1 of ECON\*2740, PSYC\*2010, STAT\*2040, STAT\*2050, STAT\*2060, STAT\*2080, STAT\*2090, STAT\*2100, STAT\*2120)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3400 The Economics of Personnel Management Unspecified (LEC: 3) [0.50]**

In this course, we examine the economics of personnel management in organizations. Using mainstream microeconomic and behavioural economic theory, we will consider such issues as recruitment, promotion, financial and non-financial incentives, compensation, job performance, performance evaluation, and investment in personnel. The interplay between theoretical models and empirical evidence will be emphasized in considering different approaches to the management of personnel.

**Prerequisite(s):** ECON\*2310 or ECON\*2200

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3500 Urban Economics Fall Only (LEC: 3) [0.50]**

Land is a scarce resource and is an input into production and consumption. Transportation costs are important and the structure of a city has real effects on the economic and social activities that occur in it. This course discusses how the price of a good varies by location, how the market price of a property varies over time, and how the structure of cities responds to market forces. The course discusses some public policy and managerial implications of the location dimension.

**Prerequisite(s):** ECON\*2310

**Restriction(s):** This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3520 Labour Economics Fall Only (LEC: 3) [0.50]**

A study of the labour market, wage determination and the relationship between wages, employment, and prices.

**Prerequisite(s):** ECON\*2310, (1 of ECON\*2740, PSYC\*2010, STAT\*2040, STAT\*2050, STAT\*2060, STAT\*2080, STAT\*2090, STAT\*2100, STAT\*2120)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3530 Industrial Organization Fall Only (LEC: 3) [0.50]**

This course examines industries in which firms have the potential to exercise market power. Topics include how the competitive environment affects the behaviour of firms, measuring the extent of market power on welfare. The performance of markets under monopolies, dominant firms, cartels and oligopolies is examined and related aspects of Canadian competition policy and regulations are discussed.

**Prerequisite(s):** ECON\*2310, (ECON\*2770 or MATH\*1210)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3580 Economics of Regulation Unspecified (LEC: 3) [0.50]**

A study of the economic reasons for government intervention in the marketplace. Emphasis will be placed on the role of crown corporations, regulatory agencies, regulation rules and public sector price-setting in the Canadian economy.

**Prerequisite(s):** ECON\*2310

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3610 Public Economics Winter Only (LEC: 3) [0.50]**

This course examines the interventionist role of government in the economy. It examines several sources of market failure which are used to justify government intervention. These include public goods, externalities and redistribution. The course also evaluates alternative sources of government revenue from the perspectives of both equity and efficiency. These include the personal and corporate income taxes, sales taxes and wealth taxes.

**Prerequisite(s):** ECON\*2310

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3620 International Trade Unspecified (LEC: 3) [0.50]**

An introduction to the general equilibrium analysis of international trade, international factor movements and commercial policy. Special emphasis is given to Canada's international trade relationships.

**Prerequisite(s):** ECON\*2310

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3710 Advanced Microeconomics Fall and Winter (LEC: 4) [0.50]**

This course provides an in-depth treatment of consumer and producer theory leading to the general equilibrium model of the economy and the study of welfare economics.

**Prerequisite(s):** ECON\*2310, (ECON\*2770 or MATH\*1210). A grade average of 70% or more in these courses is recommended.

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3730 The Origins of International Inequality Winter Only (LEC: 3) [0.50]**

This course surveys the world economy with a particular focus on the industrial revolution, demographic change, the rise to prominence of 'settler colonies', globalization and the origins of international inequality.

**Prerequisite(s):** 9.00 credits including ECON\*1050, ECON\*1100

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3740 Introduction to Econometrics Fall and Winter (LEC: 3, LAB: 1) [0.50]**

This computer-based course involves the specification and estimation of economic models and the testing of economic hypotheses using appropriate test statistics. Topics include ordinary least squares estimation, dummy variables, seasonality, multicollinearity, heteroskedasticity, autocorrelation, data sources. Additional topics may be included at the instructor's discretion. Heavy emphasis will be placed on applications and writing up results. Some use of statistical software will be required.

**Prerequisite(s):** ECON\*1100, (ECON\*1050 or FARE\*1040), (1 of ECON\*2740, STAT\*2040, STAT\*2060, STAT\*2080), (ECON\*2770 or MATH\*1210)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3810 Advanced Macroeconomics Fall and Winter (LEC: 4) [0.50]**

This course provides an advanced study of a wide range of issues in intertemporal macroeconomics. When constructing macroeconomic models in this course we will explicitly take into account microeconomic foundations. The models constructed will be used to study short-run fluctuations (or business cycles) and long term growth, and to explain cross country income disparities. Topics also include open economy macroeconomic issues.

**Prerequisite(s):** ECON\*2410, (ECON\*2740 or STAT\*2040), (ECON\*2770 or MATH\*1210)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*3900 Intermediate Special Study in Economics Summer, Fall, and Winter (LEC: 3) [0.50]**

This intermediate special study course is designed to provide an opportunity for students to gain or enhance their knowledge and understanding of a particular topic in economics and explore an area of interest beyond what is provided through regularly scheduled courses. Students will work, individually or in a group setting, to an agreed program of study and typically complete a major paper/report or series of papers/reports normally on a specific topic of choice under the guidance of a faculty member.

**Prerequisite(s):** ECON\*2310, ECON\*2410, ECON\*2740, ECON\*2770

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4400 Managerial Economics Winter Only (LEC: 3) [0.50]**

This course introduces students to the latest developments in the economic analysis of the inside workings of firms. The course is centered on the concept of organizational structure, which is made up of three variables: allocation of decision rights, performance evaluation and performance incentives. The course tries to explain the diversity of economic organizations, and more generally, why economic activity is sometimes carried out through firms and sometimes through markets.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** ECON\*2310 Students must have completed a minimum of 12 credits.

**Restriction(s):** This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4500 Topics in Urban Economics Unspecified (LEC: 3) [0.50]**

This course will investigate selected theoretical and applied topics in urban economics in depth. Among topics which might be treated are location theory, the theory of spatial structure, transportation economics, the economics of housing, the economics of land use regulation, urban public finance.

**Prerequisite(s):** ECON\*3740, (ECON\*3710 or ECON\*3500)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4640 Advanced Econometrics Fall Only (LEC: 3) [0.50]**

This is a course in applied econometrics and involves the application of econometric methods to empirically analyse important issues in economics. The course emphasizes the importance of data analytics in understanding economic model predictions by applying advanced regression techniques. These techniques can include instrumental variables, regression discontinuity, difference-in-differences, other panel data methods, big data analysis, and more. Students will learn to code and to estimate econometric models using current statistical programming software.

**Prerequisite(s):** ECON\*3740

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4700 Advanced Mathematical Economics Fall Only (LEC: 3, LAB: 1) [0.50]**

This course provides students with the necessary mathematical skills required to build rigorous models in economics, including differential and integral calculus, optimization and comparative statics analysis and advanced topics in linear algebra. It continues in the second half with application to modelling in a particular area of economics. The specific area will vary from year to year, and can include such topics as general equilibrium modelling, mathematical finance models, or economics of the environment.

**Prerequisite(s):** ECON\*3710, ECON\*3740

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4710 Advanced Topics in Microeconomics Fall Only (LEC: 3) [0.50]**

An intensive study of the scope, methodology, and content of contemporary microeconomics; selected topics in partial and general equilibrium analysis.

**Prerequisite(s):** ECON\*3710

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4720 Topics in Economic History Unspecified (LEC: 3) [0.50]**

This course uses economic theory to analyse the process of historical economic change.

**Prerequisite(s):** 12.50 credits including (1 of ECON\*2310, ECON\*2720, ECON\*3720, ECON\*3730)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4750 Topics in Public Economics Unspecified (LEC: 3) [0.50]**

This course examines selected topics related to the expenditure and taxation functions of government. Topics may include issues in public good theory such as the free rider problem, the problem of eliciting truthful revelation of preferences and the use of taxes as a corrective device for externalities. The course may also address optimal taxation as well as tax evasion. Throughout this course the trade-off between efficiency and equity is emphasized.

**Prerequisite(s):** ECON\*3710

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4760 Topics in Monetary Economics Unspecified (LEC: 3) [0.50]**

Selected topics in monetary economics such as theories of the demand for and supply of money, the nature and role of private banks and central banks, the transmission processes of monetary policy are examined.

**Prerequisite(s):** (ECON\*3600 or ECON\*3810), ECON\*3740, [1 of ECON\*3510, ECON\*3710, (ECON\*3960 or FIN\*3500)]

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4780 Topics in Industrial Organization Unspecified (LEC: 3) [0.50]**

Selected topics in the theoretical and empirical study of the organization and performance of firms and markets are covered in this course. Topics may include: strategic behaviour of firms such as actions to deter entry of rivals, pre-emptive choice of location and product quality, and research and development; the regulation of firms under uncertainty; econometric analysis of the use of market power; and modern advances in the theory of the firm.

**Prerequisite(s):** ECON\*3530, ECON\*3740

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4790 Topics in Labour Market Theory Unspecified (LEC: 3) [0.50]**

Selected topics in advanced labour market theory with emphasis on empirical evidence for the Canadian labour market are covered in this course.

**Prerequisite(s):** ECON\*3740, (ECON\*3710 or ECON\*3520)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4800 Competitiveness and Strategic Advantage Unspecified (LEC: 3) [0.50]**

This course is about the creation and maintenance of long-term vision for the corporation from the perspective of the general manager. It is concerned with both the determination of strategic direction and the management of the strategic process.

**Prerequisite(s):** 14.50 credits including ECON\*2310, (BUS\*3320 or MGMT\*3320), (ECON\*2560 or FIN\*2000)

**Restriction(s):** This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4810 Advanced Topics in Macroeconomics Winter Only (LEC: 3) [0.50]**

This course explores the theory of complex aggregate economic models; their assumptions, construction, and use in the analysis of macroeconomic activity.

**Prerequisite(s):** ECON\*3740, ECON\*3810

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4830 Economic Development Fall Only (LEC: 3) [0.50]**

A study of the theories, problems and policies of economic growth with special reference to underdeveloped countries.

**Prerequisite(s):** ECON\*2310

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4860 Seminar in Current Economic Problems Unspecified (LEC: 3) [0.50]**

In a seminar setting, selected contemporary economic problems are examined.

**Prerequisite(s):** (ECON\*3600 or ECON\*3810), ECON\*3710, ECON\*3740

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4880 Topics in International Economics Unspecified (LEC: 3) [0.50]**

Selected topics involving the advanced analysis of the causes and effects of trade and financial flows and international factor movements are covered in this course.

**Prerequisite(s):** [1 of or ECON\*3610, ECON\*3810, (ECON\*3860 or FIN\*3400)], (ECON\*3710 or ECON\*3620)

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4890 History of Economic Thought Unspecified (LEC: 3) [0.50]**

A study of the development of economic theory, the tools of economic analysis, and the evaluation of economics as a science, together with an analysis of the circumstances affecting this development.

**Prerequisite(s):** ECON\*2310, ECON\*2410

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4900 Special Study in Economics Summer, Fall, and Winter (LEC: 3) [0.50]**

The special study option is designed to provide senior undergraduate students with an opportunity to pursue an independent course of study. The subject matter will be related to regular 4000 level courses. Students will be required to submit a major paper/report on the subject matter studied. Formal agreement between the student and instructor of the course is required as well as the approval of the department chair or designate.

**Prerequisite(s):** (ECON\*3600 or ECON\*3810), ECON\*3710, ECON\*3740

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4910 Special Study in Economics Summer, Fall, and Winter (LEC: 3) [0.50]**

The special study option is designed to provide senior undergraduate students with an opportunity to pursue an independent course of study. The subject matter will be related to regular 4000 level courses. Students will be required to submit a major paper/report on the subject matter studied. Formal agreement between the student and instructor of the course is required as well as the approval of the department chair or designate.

**Prerequisite(s):** (ECON\*3600 or ECON\*3810), ECON\*3710, ECON\*3740

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph

**ECON\*4930 Environmental Economics Fall Only (LEC: 3) [0.50]**

This course is an advanced treatment of the interrelationship between economic activities and the state of the natural environment from an economics perspective.

**Prerequisite(s):** 14.50 credits including ECON\*2310, ECON\*2770

**Department(s):** Department of Economics and Finance

**Location(s):** Guelph