

## GUIDELINES FOR ECONOMICS CORE COURSES (intro level)

### ECON 201: Introductory Microeconomics

Theory of how individual consumers and firms behave in a market economy. Emphasis is on evaluating how well markets deliver efficient and fair outcomes.

\*\*\* Prerequisite: 15 credit hrs or Econ 100 or Pre-Calculus 20 (or equivalent)\*\*\*

This is the typical first-year principles/foundations of microeconomics course. The assumption must be made that many students have NOT previously taken any Economics course.

#### Learning Objectives

- introduction to basic models in consumer theory, theory of the firm
- develop familiarity with the use of functional notation, graphs and simple linear algebra in economic analysis
- development of important ideas in economics –for e.g. marginal analysis, opportunity cost, economic efficiency – and relating it to the economic analysis that is presented
- applications such as price floors/ceilings, taxes, market failure, public goods
- optional other topics – trade, input markets

#### Core topics

1. Introduction, opportunity cost, PPF, introduction to central ideas
2. Demand and supply – graph analysis, use of linear algebra
3. Comparative statics/factors that change D&S, elasticity and applications
4. Government intervention (price, quantity, and taxation)
5. Consumer and Producer Surplus and economic efficiency
6. Consumer theory – marginal utility analysis, optimal consumption rule
$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$$
7. Theory of the firm – Short run production, cost curves, profit maximization. Treatment of the long run costs limited to assuming U-shaped LRAC curves. Firm and industry supply under perfect competition in short run and long run.
8. Introduction to Perfect Competition, long run market equilibrium and derivation of long run supply curve
9. Monopoly
10. Imperfect completion: Oligopoly, Monopolistic competition
11. Externalities and public goods

## **Optional Topics**

12. International trade
13. Input markets

## **Suggested textbooks**

Microeconomics: Second Canadian edition by Krugman, Wells, Au and Parkinson

Microeconomics: First Canadian Edition by Hubbard, O'Brien, Serletis and Childs

Principles of Microeconomics: Seventh Canadian Edition by Mankiw, Kneebone and McKenzie

## **ECON 202: Introductory Macroeconomics**

Basic economic concepts are used to explain how economies operate at a national or regional level, with a focus on production, income, interest rates, prices, inflation, and unemployment. Principles are introduced for understanding and evaluating the methods by which governments can smooth fluctuations in overall economic activity.

**\*\*Prerequisite: 15 credit hours or ECON 100 or Pre-Calculus 20 (or equivalent)\*\***

This is the typical first-year principles/foundations of macroeconomics course. The assumption must be made that many students have NOT previously taken any Economics course.

## **Core Topics**

1. Economic Basics – What is economics; the economic problem; demand and supply diagram and curve shifting exercises
2. Macroeconomic Basics – Issues of growth, inflation and unemployment; definitions and measurement
3. Modeling Framework – Aggregate Expenditure Model; Aggregate Demand and Aggregate Supply Model; multipliers
4. Analysis of macro issues – growth, unemployment and inflation
5. Policy – Government budgets and fiscal policy; money, financial system, monetary policy

### **Additional Topics may include**

6. International trade, finance
7. Labour market extensions

Basic Math Skills: Graphical analysis; linear algebra

### **Learning Objectives:**

1. Basic Economic Literacy – students completing this course will be able read and interpret macroeconomic reports in the general media
2. Students completing this course will have a working knowledge of the measurement and limitations of the key macroeconomic variables
3. Students completing this course will be able to perform basic calculations using the aggregate expenditure model, expenditure multipliers, and money multipliers.
4. Students completing this course will understand the limitations of the basic mathematical models presented.
5. Students completing this course will be able to perform a basic analysis of economic policy.

It is crucial to provide frequent feedback on students' progress. It is highly recommended that students receive assignments, quizzes and examinations scheduled on a bi-weekly basis if not of higher frequency.

### **Suggested textbooks**

*Macroeconomics* by Ragan; *Principles of Macroeconomics* by Mankiw, Kneebone, and McKenzie; *Macroeconomics* by Krugman, Wells, Au and Parkinson; *Macroeconomics* by Hubbard, O'Brien, Serletis, and Childs

### **ECON 224: Empirical Economics**

This course introduces students to various sources of economic data. Using Excel, students will perform data analysis and conduct hypothesis tests and simple regressions.

\*\*\* Prerequisite: 15 credit hours or Econ 100 \*\*\*

The objectives of this course are to help enable the student to find, collect, evaluate, analyse and present economic data. The student will be introduced to economic and statistical concepts and techniques.

For most Econ majors, this course is a terminal course in research methods and data analysis. This course is a complement to Econ 280: Writing for Economists, and together, are meant to prepare students for research essays and projects to be completed in 300- and 400-level courses, and to prepare students in their careers as professional economists.

This course is a pre-requisite for Econ 480: Seminar in Economics

### **Core Topics**

1. Role and use of data in economic analysis
  - a. Economic theory, empirical support (or lack thereof), and inference
  - b. Use of data in media
  - c. Correlation vs causation in statistical inference
2. Accessing data – library and other sources of data (students could be taken to the library and introduced to Marilyn Andrews, and given a “tour” of data resources)
  - a. Assessing data quality and usability – understanding data and limitations; the intelligent consumption of primary and secondary data.
  - b. Quantitative vs. qualitative data
3. Descriptive and summary statistics from source data
  - a. Include the calculation of unemployment rates, Gini coefficients, growth rates, and any other commonly used economic statistics in the media, from source data
4. Probability distributions and sampling
5. Hypothesis testing
6. Introduction to linear regression

### **Learning Objectives**

1. Students will be able to find data, effectively present graphs and tables, and analyze results, to answer major economic questions
2. Students will become familiar with commonly-used economic databases including Cansim/E-Stat, and with survey databases
3. Students will be able to analyze and critique media presentations using data, and contribute to economic debate
4. Students will develop the capacity for critical thinking concerning data and its presentation

5. Students will become familiar with spreadsheets program(s) – Excel and/or its competitors – and their limitations

Students may be introduced to an additional statistical software program like SPSS.

Home assignments must be empirical in nature requiring students to access data from various on-line data sources and requiring the use of Excel to analyze the data.

Optional: Students may be given an assignment that analyses and critiques a media article.

It must be noted that plagiarism is often detected in this course. Plagiarism should be discussed throughout this course. In addition, to ensure students are learning on their own and completing their own work, the instructor may choose to hold laboratory examinations, in-class examinations, and/or assignments that can be classified as student-specific (e.g. artificial/simulated data sets can be student-specific).

### **Standard required textbooks**

- Lewis, M.: *Applied Statistics for Economists*
- Anderson, D., Sweeney, D., & Williams, T.: *Essentials of Statistics for Business and Economics*

### **Supplementary materials**

- Hudson, P.: *History by Numbers: An introduction to quantitative approaches.*
- Epstein, G.: *Econospinning: How to read between the lines when the media manipulate the numbers.*
- Best, J.: *More Damned Lies and Statistics*