

**Professor Jim Engle-Warnick**  
**Office:** Leacock 321a  
**Telephone:** 514 398-4400 x09001  
**e-mail:** please contact the TA's first, and contact me by webct  
**Office Hours:** 12 noon – 1pm Tuesday and 2:30pm – 3:30pm Thursday

**Course location:** MAASS Chemistry Building 112

**Date and time:** Tuesday and Thursday, 1:05pm – 2:25pm

**WebCT Communication:** Please contact the TAs first for e-mail communication. They will handle administrative issues in this course. They are instructed to relay important information to me.

If you wish to contact the instructor by e-mail, please use the facility in WebCT. It is unlikely that I will respond to a message that requires more than a yes or a no answer. A discussion list is available for use on WebCT. Important events will be posted on the WebCT calendar. If you have a pressing need, the best time is to see me before or after class or during office hours.

**A note about calculus, since the book has calculus in its title:**

**Pre-existing knowledge of calculus is not required for this course, nor is it a significant advantage. Knowledge of algebra is required. You will learn an algebraic manipulation that comes from calculus at the beginning of the semester, and then apply it in economics.**

**Textbook:** The textbook package available at the bookstore is a specially designed combination of two books. It contains all of the following book:

Perloff (2011): *Microeconomics (with Calculus)*, 2<sup>nd</sup> ed., Pearson.

The package also contains an e-book with four chapters from the following book:

Barnett, Ziegler, and Byleen (2008): *Calculus for Business, Economics, Life Sciences, and Social Sciences*, 12<sup>th</sup> ed., Pearson.

We will cover four chapters in the Barnett et al. book (3, 4, 5, and 8) at the beginning of the fall semester. We will use these chapters to learn how economic intuition comes from the math we use, and to learn how to handle partial derivatives, which to you will be an algebraic manipulation that you memorize for the specific functions we typically cover in economics. You will not learn calculus (though you might become interested in learning it later), nor do you need any calculus to take this course. Learning this single algebraic manipulation vastly increases the diversity of topics I can teach you in this course, and does not affect the level of algebra you need to be qualified to take the course.

For example, you will learn about demand functions, which are defined as the amount of a good demanded by a consumer as a function of her income and the prices of available goods. When we teach the course without any partial derivatives, the only two types of demand functions you can solve are those that are called perfect complements (like shoes: when you demand one left shoe you also demand a right one) and perfect substitutes (the type of good where you always willing substitute exactly a constant amount of one good for another, no matter how much of either good you have: I'll give up one Hershey's chocolate bar for one Snickers, whether I have 1000 hershey's and 1 snickers, or 501 hershey's and 500 snickers).

In reality, most goods are something in between, where the amount you will substitute one good for another depends on how much of the good you have. You can only solve that type of consumer's decision problem if you handle a partial derivative. I want you to learn how to handle more than just two special cases of one of the most important problems in economics.

So we will learn a little bit of math first, and then we will cover the first eleven chapters of the Perloff book this semester. We will cover the rest of the Perloff book in the winter term.

### **Textbook requirements:**

Option 1: The package of books: hardcover Perloff book with myeconlab, and e-book with four math chapters from Barnett et al. e-book.

Option 2: If you have had calculus, you may not need the math chapters included in the package, so you can consider the Perloff book with myeconlab alone.

Option 3: You may also be interested in buying used versions of these books, which should be no problem.

Advice: When you make your decision, remember that this course is reasonably important: it certifies you as being able to think like an economist. Also remember that you are investing in an entire year course, not just the fall semester, so divide the price by two, please.

**Requirement 1: The one thing you must have is the myeconlab subscription for the Perloff book to do the on-line homework assignments. You buy this from the publisher, it is possible to get it online.**

By doing the homework on line, you get immediate feedback on your performance, and you get problems that prepare you well for the exams

You will need to use a computer with an internet connection to complete homework assignments. These on-line assignments are graded immediately, giving you immediate feedback on your progress in the course. Course ID: [XL0R-016P-901Z-1282](#).

**Course pack:** There is no course pack. Some of the information in the book will be supplemented with notes.

**Content:** The year-long course ECON230 is an introduction to economic theory, in which you learn analytical tools necessary to be able to read, understand, and evaluate modern economics. The fall term focuses on consumer and producer theory. The winter term focuses on choice under uncertainty and game theory. Algebra is required. Calculus is not required. In this section, you will have the same instructor for the entire year.

**Learning Outcomes:** You will learn to read, understand, apply, and solve models related to consumer and producer theory and general equilibrium in the fall semester. You will do the same with games of complete and asymmetric information, and individual choice theory in the winter semester.

**Assessment:** Winter terms: midterm exam: 35%, final exam: 60%, homework and quizzes assigned on myeconlab: 5%. Homework and quizzes grade will simply be the reported score from myeconlab. We will run economics experiments periodically which will be considered lectures and not contribute to assessment. Midterms and finals will be computer graded multiple choice. This represents a trade-off: the good part of the tradeoff is that the homework is aligned with the exams, and the final grade is as objective as possible. The practical aspect of this is that you will be graded on a wide range of topics with multiple choice exams, so everything I teach, you should learn.

If you miss the midterm, all of its weight will be placed on the final exam. You do not need any documentation for missing the midterm. Notice that the midterm is worth taking at 35% of your grade. You are much better off not to miss the final exam. If you miss the final exam this fall semester, the service point handles this as if it were a midterm exam. Don't ask me why. You will have to present to me a doctor's note to be excused, and you must take the make-up final exam with me in the second week of the winter term. You should only miss the final exam if you absolutely positively cannot possibly make it.

Midterm Exam: Tuesday, October 18th (unless this turns out to be a religious holy day, and if i can get a second room to handle the exam).

In this section, you will have the same instructor all year for this course. We have determined that the content is presented in the other section in a way that is not compatible with taking this section one semester and the other section for the other semester. This means that you have to stick with whatever section you start with this year for the full year.

**How your final grade will be determined:** Each semester will count as  $\frac{1}{2}$  of your grade; no exceptions, except for transfers from ECON250. Your grade will be computed to two decimals and rounded up: if you receive a 64.5, your grade is a 65. If you receive 64.40, your grade is a 64. There are no exceptions to either of these rules.

**TAs:** . At this writing, there are 220 students enrolled in the course with two TA's.

The TAs have responsibility to handle e-mails for “ask my professor” on myeconlab, to have office hours during which they are prepared to work problems as are done in conferences, and to help with grading and administering exams. They will handle requests for grade reports in the full year course, for things like study abroad and other programs. You should contact them also for any pressing need, which they will relay to me, ensuring I become aware of it. They are also responsible for administering the midterm and for handling deferred exams from the first semester. The TA's are more quickly accessible than I am; please contact them first.

TAs and office hours/conferences:

The TAs will be prepared to work through problems, and will answer your specific questions about the course materials in office hours located in small classrooms. This will be the procedure that replaces conferences this year.

Fatemeh Behzadnejad:

Fatemeh.behzadnejad@mail.mcgill.ca

Tuesday: 2:30-4:00 pm Leacock L324B

Wednesday: 12:00-1:30 pm Leacock L324B

Dina Tasneem:

Dina.tasneem@mail.mcgill.ca

Tuesday and Wednesday 4-5:30pm Leacock 324B

### **Transfers from ECON250 only**

If you complete at least 85% of the Myeconlab assignments due before your transfer, your grade for the course will be  $\frac{1}{3}$  of your 250 grade and  $\frac{2}{3}$  of your 230 grade.

Otherwise, your 230 and 250 grades will be weighted equally.

## General Information:

### *Policy on mobile and communications devices in this class:*

Since this class is very full, mobile computing and communications devices are permitted to be used in this class insofar as their use does not disrupt the teaching and learning process. This means simply that when used there must be respect for fellow students (and the instructor), as well as freedom from distraction for fellow students (and the instructor). If I receive evidence that either of these conditions is being violated, these devices will not be permitted in class. The policy concerning the rights of students with disabilities will always be respected.

- *"McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/) for more information).*
- *"In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded."*
- *"Instructors who may adopt the use of text-matching software to verify the originality of students' written course work must register for use of the software with Educational Technologies ([Email](#)) and must inform their students before the drop/add deadline, in writing, of the use of text-matching software in a course."*
- *"If you have a disability please contact the instructor to arrange a time to discuss your situation. It would be helpful if you contact the Office for Students with Disabilities at 514-398-6009 before you do this."*
- *"Additional policies governing academic issues which affect students can be found in the McGill Charter of Students' Rights" (Chapter One of the Student Rights and Responsibilities Handbook available as a PDF on <http://www.mcgill.ca/study/2010-2011/>).*
- *"McGill University shall strive to be recognized as an environmentally safe and responsible institution, and as a model of environmentally responsible living." (see [Environmental Policy for McGill University](#))*
- *In keeping with McGill's [preparedness planning strategies with respect to potential H1N1 flu concerns](#), "In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change."*

## **Topics and Readings:**

### **Fall Term:**

#### **1: Introduction to functions and partial derivatives**

### **Supply and Demand:**

#### **2: Supply and Demand**

#### **3: Applying the Supply and Demand Model**

### **Consumer Theory:**

#### **4: Consumer Choice**

#### **5: Applying Consumer Theory**

### **Producer Theory:**

#### **6: Firms and Production**

#### **7: Costs**

### **Perfect Competition**

#### **8: Competitive Firms and Markets**

#### **9: Applying the Competitive Model**

#### **10: General Equilibrium and Economic Welfare**

### **Market Power and Market Structure**

#### **11: Monopoly**

### **Winter Term (just for your information):**

### **Market Power and Market Structure**

#### **12: Pricing and Advertising**

#### **13: Oligopoly and Monopolistic Competition**

#### **14: Game Theory**

### **Factor Markets:**

#### **15: Factor Markets and Vertical Integration**

#### **16: Interest Rates, Investments, and Capital Markets**

### **Uncertainty, Missing Markets, Limited Information**

#### **17: Uncertainty**

#### **18: Externalities, Open Access, and Public Goods**

#### **19: Asymmetric Information**

#### **20: Contracts and Moral Hazards**