## Eco 206Y1Y L101, L201, L501: Microeconomic Theory, Fall 2017 - Winter 2018 Prof. Freitas, Department of Economics, University of Toronto

Course Description	Microeconomics studies an individual's decision-making behavior and the patterns that result when they interact in a market. In this course, we will flesh out what you learned in Eco 100 by getting into details and building a deeper, nuanced understanding of economic concepts. You will learn the basic tools of the field and when and how to apply them. We will use <i>math</i> to get precise and as a way to discipline our logic and we will use <i>writing</i> about economics as a way to learn it. Our goal is to equip you with the tools and methods of economic reasoning to be successful in the upper-level courses and beyond. Critical thinking, application and communication skills are emphasized. We hope you will <i>actively participate and engage</i> with the material as it is the best way to learn microeconomics and it makes it a lot more fun.
Learning Objectives	<ul> <li>By the end of this class successful students should be able to</li> <li>Explain the basic concepts of Microeconomics using math, graphs and clear English.</li> <li>Use the math tools with a high degree of proficiency.</li> <li>Conduct well-structured, logically consistent economic analysis and communicate their reasoning precisely in clear English.</li> <li>Problem solve using course concepts – i.e. when given a problem they have not seen before they should be</li> </ul>

- Problem solve using course concepts i.e. when given a problem they have not seen before they should be able to setup a solution strategy, choose the appropriate tool, use it correctly and solve for the correct answer.
- Apply course concepts to a given real world situation— i.e. identify essential features, choose an appropriate framework, check if required assumptions hold and conduct analysis.
- Critically evaluate economic arguments i.e. identify main arguments, identify and articulate how and why they depend on the assumptions made and explain how they would change when the assumptions are changed.

### COURSE INFORMATION

Meeting	Section	Lecture day, time (location)	Tutorial day, time (location)	TopHat Join Code	
information	L101	Wed, 10-12 noon (Fall-WI 1016 Winter- LM162)	Thu, 6-8pm (Fall-WI 1016 Winter- LM162)	436617	
	L201	Wed, 2-4 pm (RW 117)	Thu, 6-8pm (RW 117)	312012	
	L501	Wed, 6-8 pm (SS 1087)	Thu, 6-8pm (SS 1087)	370115	
Contact Information	Prof. Freitas: Office – GE 224, <u>k.freitas@utoronto.ca</u> , 416-978-2268 TAs: Rami Abou-Seido <u>rami.abou.seido@mail.utoronto.ca</u> , David Walker-Jones <u>david.walker.jones@mail.utoronto.ca</u> and Ming-Yu Hu <u>mingyu.hu@mail.utoronto.ca</u>				
Office Hours	<ul> <li>Prof. Freitas: Mondays 9.30-11.30am, Friday 12.30-1.30pm (location GE 213). This is a large room and you are encouraged to come in even if you don't have any specific questions. In the past students have worked on the material in the room, using me as a resource if they need help. It is also a way to get to know other students and form study groups.</li> <li>TA: Rami – Tue 12:30-1.30pm (GE 213) and Thu 12:30-1.30pm (GE 313). Same advice applies.</li> <li>Additional help: Economics Study Center (GE 110): Mon – Thu 11-5pm, Fri 1-3pm</li> </ul>				
Links	Course website: http://freitas.faculty.economics.utoronto.ca/eco206-2/ and Portal				
	MyEconLab: http://www.pearsonmylabandmastering.com/northamerica/myeconlab/				
	Piazza: https://piazza.com/utoronto.ca/fall2017/eco206/home				
	Tophat: <u>http://tophat.com</u> Use the Join code for your section.				

Required Text	<i>Microeconomics: Theory and Applications with Calculus, 4<sup>rd</sup> Ed. by Jeffrey M. Perloff.</i> . You can use the 3 <sup>rd</sup> edition as long as you note any differences in coverage. (1 copy of each versions is available in Robarts's course reserves.) <sup>1</sup>					
Required Graded Homework	the math in this class requires regular practice with feedback. We will be using MyEconLab for online weekly					
	Registration instructions are on Portal. A standalone access code (without the e-text) can be purchased for \$41.25. You could alternatively purchase the access code bundled in with the physical textbook (\$175) or with the e-textbook (\$120). If you buy a <u>used</u> textbook, you will need to buy a separate MyEconLab code. These are <u>specially negotiated prices available only from the UofT bookstore</u> .					
Required	A paid subscription is required. If the cost is an issue for you, please contact me asap.					
In-class Participation tool	Lectures are discussion based and I like to hear from everyone. Technology is an efficient way to aggregate answers. We will use <u>Top Hat</u> as a way to encourage you to actively participate. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or via text message (SMS). I will have two extra devices every class, available first come first serve. Registration instructions are on Portal. We have negotiated a lower price, \$30 for the year, so please follow the instructions there.					
	You must sign up and attend the section you are officially registered in to get credit for class participation. The system is not as flexible as clickers and that is the only way I can minimize errors with transferring grades is if a student picks a section and sticks with it for the year. With 320+ students the only way to do this efficiently is to use the ROSI registration. As this is a required class, in the interests of fairness, this rule will apply to all students. When you register for a course, you are expected to be available at that time. <i>If you have a conflict that cannot be resolved, please contact me by the second week of class.</i>					
Lectures and Tutorials	Lecture Handouts will be posted on Portal the night before. During class, we will use the slides as a framework to guide our discussions and problem solving. This means that they will be sparse. They are <b>not lecture notes and not a substitute for attending lecture.</b> Microeconomics requires <b>you</b> to actively engage with the material. This is why I will <i>not</i> be posting marked up slides. You will need to supplement them with your own notes, both during and after class, for them to be effective study aids.					
	50 minute tutorials will be held on Thursday evenings 6-7pm, except for when we have tests. You are free to attend any tutorial, space permitting. <b>Tests will require the entire 2-hour block.</b> You are expected to be available during this time as it is official class time. Occasionally we may use the extra hour as additional lecture/tutorial time.					
Communication - Email, Website and Portal	I will use the <b>website</b> ( <u>http://freitas.faculty.economics.utoronto.ca/eco206-2/</u> ) to communicate general information and announcements. All course material, past exams, problem sets, assignments etc. will be on Portal. You are responsible for checking both the website and Portal regularly. We will be using <b>Piazza</b> for class discussion. Please post questions on course material there. Posting your questions and answers on the forums is an efficient way to get help and build a 206 community. All <b>email</b> communication will be sent to the class list on Portal. If your email can be answered briefly, I will try to respond to within 3 business days. If you do not get a reply please check Portal, the website, Piazza, the syllabus or see me.					
Prerequisites	You will be dropped from the course if you do not have the required prerequisites. I will expect you to be comfortable with the calculus in the prerequisite courses. <u>http://www.artsandscience.utoronto.ca/ofr/calendar/crs_eco.htm#ECO206Y1</u> <u>http://www.economics.utoronto.ca/index.php/index/undergraduate/load/prerequisites</u>					

<sup>&</sup>lt;sup>1</sup> The differences between the 3rd and 4<sup>th</sup> ed. are summarized <u>here</u>. I have no experience with the earlier editions, the same advice about checking coverage applies to them as well. When I post question numbers for the problem sets or refer to text material in the class I will use the 4th ed. For convenience.

### EVALUATION

Important	The grade for this class will be based on the term work below.					
Dates	Test	Weight	Date	Time	Location	
	Writing Assignment 1	6%	Oct 26	10:00 AM	Online**	
	Midterm 1	17%*	Nov 23	6:10 PM, 90 mins	ТВА	
	Writing Assignment 2	7%	Dec 7	10:00 AM	Online**	
	Midterm 2	17%*	Jan 25	6:10 PM, 90 mins	ТВА	
	Writing Assignment 3	7%	Mar 8	10:00 AM	Online**	
	Midterm 3	17%*	Mar 22	6:10 PM, 90 mins	ТВА	
	Weekly Homeworks 8% On problem set		On problem set	Online- MyEconLab***		
	In-class participation	5%	Du	ring Lecture ****	Online- TopHat ***	
	Final	25%	Fin	al exam period	Determined by A&S	
	**** You must participate in the section you are officially registered in to get credit					
	* The total weight on the midterms will be 42%. Lowest score weighted 8%, others 17% each					

\*\* To be submitted on Portal and Turnitin by deadline to count as submitted

\*\*\* Paid registration required. Please see Portal for details

Tests Exact coverage will be posted before each test. In general, midterms are not cumulative, but course concepts build on prior material so you cannot completely ignore it. The final is **cumulative** and will cover all of the material from the course.

# Assignments The Economics department has implemented writing widely. The reasons for this are (1) to get and be successful in a job you will need to know how to communicate economic reasoning well. It is a <u>valuable workplace skill</u>. (2) Writing about economics helps you learn economics in a way that complements problem-solving<sup>2</sup>.

There will be **three individual writing assignments**. Further details will be provided on Portal. You will need to submit them in **two** ways to avoid the late penalty- on **Portal** and on **Turnitin.com** by the due dates. Check the Assignment Instructions on Portal for more details. **No extensions** are granted for any reason (illness, computer problems etc.) There is a 10% points (out of 100) penalty per 24 hours, per assignment late submissions.

MyEconLab Due dates and times on the problem set and cannot be completed once the due date has passed. No extensions Homeworks are granted for any reason (illness, computer problems etc.). Your lowest 2 homework scores will be dropped to account for this. You get two tries for each question as the goal is learning. However, using the "Help me solve this" function counts as one try.

TopHat<br/>ClassIn-class participation will be coarsely graded as the purpose is active participation. Points are allocated for both<br/>participation and correctness. Questions will need to be answered during lecture using Apple or Android<br/>smartphones and tablets, laptops, or via text message (SMS). No exceptions are granted for any reason (illness,<br/>etc.). Lecture 24 will serve as a make-up. It will replace your lowest two scores if it is higher. The first week does<br/>not count for a grade.

RegradeRequests for re-grades will be accepted in writing up to two weeks after term work is returned. Fill in the regradeRequestsrequest form available on Portal. We will re-read your entire exam so your mark could go up, down or remain<br/>unchanged.

<sup>&</sup>lt;sup>2</sup> Crowe, D., & Youga, J. (1986). Using writing as a tool for learning economics. *The Journal of Economic Education*, 17(3), 218-222.

### HOW TO SUCCEED IN THIS COURSE

- Put in the time, consistently: Plan to spend 8-10 hours a week on this course<sup>3</sup>. Last minute cramming leads to superficial understanding which gets exposed in the tests. Regular practice over a longer time period leads to deeper learning that lasts beyond the final exam.
- Use the time effectively: Form a study group. As you solve problems, focus on the concepts not the procedure. Ask why do we get this? What if some elements were different? What are the similarities/differences with what you've seen before? Write out your reasoning, etc. Get help early office hours, study center, Piazza.
- Know what we are looking for on the exams: Problem solving is an important learning outcome and an essential job skill. It is what you do when you use your conceptual knowledge to answer a question you *haven't seen* before. The emphasis is *on how* you approach the question and the quality of your reasoning. Memorization and matching patterns will not help you.
- Take ownership of your learning: Remember you are taking this course to make you a better economist. Make your effort count. Read the material before class and come to lecture ready to actively participate and problem solve. The analogy I like to use is that this class gives you a big box of new blocks. You need to use them to build something in response to a problem. Listening to me talk/reading the text or someone else's lecture notes is the equivalent of watching a demo/reading the instruction manual helpful but not enough to build skills to respond to new situations. You need to know what blocks you have and all the ways they can fit together. This requires you to experiment on your own. Try different combinations, make mistakes and most important practise, practise, practise! Sometimes it may be a little tedious, but, when you actively engage with the material, you will become a good economist and have fun along the way. I look forward to learning with you this year!

### COURSE POLICIES

MissedTo have a makeup count for a missed test you must follow ALL the steps below. If this is an issue that lasts for moreMidtermthan a few days contact your College Registrar immediately. Make-up tests are cumulative and will be scheduled at a<br/>date and time chosen by the professor with as little as <u>one business days' notice by email</u>. The make-up can be used<br/>to substitute for *one* missed test.

<u>Step 1</u>: Send me email that follows the format below:

- 1. It is sent BEFORE the midterm from your official UofT email address (no gmail etc. email ids).
- 3. The subject line should be "Eco 206: Fall 2017 Missed Midterm".
- 4. It explains concisely (less than 100 words) why you are not able to take the exam.
- 5. It explains what you have done to prepare for the Eco 206 midterm or says that you have not done anything.

6. The email should end with the following sentence exactly as written "I understand that it is a punishable academic offence to present false or misleading information in support of my request for accommodation for missed term work"

7. This sentence should be followed by your FULL NAME and STUDENT NUMBER.

<u>Step 2 (Documentation</u>): Within a week, for short-term illnesses, drop off an original, completed, official UofT <u>Verification of Student Illness or Injury form</u> at the economics reception in GE. For longer term illnesses or nonmedical issues, you must meet with your college registrar and provide them with the appropriate documentation. If they are satisfied, ask them to contact me to ask for special consideration on your behalf.

<u>Step 3</u>: You will get an email within 3 business days of the missed exam with the details of the make-up test. <u>Step 4</u>: Take the make-up test. As per university policy, there is no "make-up" for the make-up test. You will get zero if you miss the make-up exam.

NOTE: The final decision to accept any excuse lies with me or the undergraduate chair. You may get your grades for the make-up *after* the drop deadline. The format may be different from the class test.

Academic Integrity is central to a UofT education. We take it seriously and so should you. When we come up with new ideas we draw on contributions people have made. We must properly acknowledge them. You'd want others to do the same for your work. If you have any questions or need clarifications, please don't hesitate to ask. Better safe than sorry.

We expected you to have read the University of Toronto's <u>Code of Behavior on Academic Matters</u>. Please see: <u>http://www.artsci.utoronto.ca/osai</u> for more details. All suspected cases of academic dishonesty will be reported to

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<sup>&</sup>lt;sup>3</sup> A full time student should spend 40-50 hours a week on coursework. With 5 courses this works out to 8-10 hours a course.

the Department of Economics and OSAI and the consequences can be severe. Being unaware of the policies or what constitutes plagiarism is, unfortunately, not a defense.

Use of Your writing assignments must be submitted to <u>Turnitin.com</u>. The University policy is:

Turnitin "Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site".

**Resources** Students with diverse learning styles and needs are welcome in this course. Please feel free to approach me or Accessibility Services so we can assist you in achieving academic success in this course.

If you need accessibility services/accommodation please see: http://www.studentlife.utoronto.ca/as

Resources to help you at the UofT are listed at: https://www.studentlife.utoronto.ca/asc

For course-related issues, please get in touch with me and your College Registrar. For longer run issues or issues outside our course please contact your College Registrar -

http://www.artsci.utoronto.ca/newstudents/nextsteps/contact

### COURSE OUTLINE

All the material we cover in class, tutorials, textbook, problem sets, writing assignments and homeworks are considered testable material. All the material in the chapter, including appendices are included unless explicitly stated. The schedule is subject to change. You may have to do additional readings which will be posted during the course.

Week	Date		Chapters	Material
	7-Sep	No class		
1	13-Sep	Lecture	1, 3.3	Introduction and Budget Constraints
	14-Sep	Tutorial		Math Review
2	20-Sep	Lecture	3.1,3.2	Preferences and Utility
	21-Sep	Tutorial		
3	27-Sep	Lecture	3.4	Choice
	28-Sep	Tutorial		
4	4-Oct	Lecture	4.1-4.2	Demand and Income Effects
	5-Oct	Tutorial		
5	11-Oct	Lecture	4.3-4.4	Substitution Effects
	12-Oct	Tutorial		
6	18-Oct	Lecture	5.4, 2.5	Labor Supply, Elasticities
	19-Oct	Tutorial		
7	25-Oct	Lecture	5.1-5.3	Consumer Surplus
	26-Oct	Tutorial		Writing Assignment 1 due
8	1-Nov	Lecture	16	Consumer Surplus, Uncertainty
	2-Nov	Tutorial		
	8-Nov			Reading week no class
	9-Nov			Reading week no class
9	15-Nov	Lecture	16	Uncertainty
	16-Nov	Tutorial		
10	22-Nov	Lecture	6	Production
	23-Nov	Midterm		Midterm 1: Coverage lectures 1-9
11	29-Nov	Lecture	7	Cost Minimization and Cost curves
	30-Nov	Tutorial		

12	6-Dec	Lecture	8, 15.1	Profit Maximization and Factor Demand
		Tutorial		Writing Assignment 2 due
	4-Jan			
13	10-Jan	Lecture	2.1-2.4,9.1-9.2	Perfect Competition
	11-Jan	Tutorial		
14	17-Jan	Lecture	2.6-2.8, 9.3-9.5	Welfare and Distortions
	18-Jan	Tutorial		
15	24-Jan	Lecture	10	General Equilibrium
	25-Jan	Midterm		Midterm 2: Coverage lectures 10-14
16	31-Jan	Lecture	11	Monopoly and Monopsony
	1-Feb	Tutorial		
17	7-Feb	Lecture	12	Price Discrimination
	8-Feb	Tutorial		
18	14-Feb	Lecture	13.1	Game Theory - Static Games
	15-Feb	Tutorial		
	21-Feb			Reading week no class
	22-Feb			Reading week no class
19	28-Feb	Lecture	13.2	Game Theory - Dynamic Games
	1-Mar	Tutorial		
20	7-Mar	Lecture	14.1-14.3	Oligopoly - Cournot
	8-Mar	Tutorial		Writing Assignment 3 due
21	14-Mar	Lecture	14.4-14.5	Oligopoly - Bertrand, Stackelberg
	15-Mar	Tutorial		
22	21-Mar	Lecture	17.1-17.5	Externalities
	22-Mar	Midterm		Midterm 3: Coverage lectures 15-21
23	28-Mar	Lecture	17.6	Public Goods
	29-Mar	Tutorial		
24	4-Apr	Lecture	18,19	Adverse Selection and Moral Hazard