



UNIVERSITY OF TORONTO

| Department of Economics (St. George) | ECO 204 | Microeconomic Theory (Commerce) | Summer 2012 |

Nec Aspera Terrent

| [Academic Integrity](#) | [Academic Success Center](#) | [Announcements](#) | [Course Description](#) | [Course Material](#) | [Detailed Course Plan](#) | [Grading Scheme](#) | [Instructors Info](#) | [Micro in the News](#) | [Office Hours](#) | [Papers Info](#) | [Some Past Tests](#)
| [Test Remark Request Form](#) | [University of Toronto Search Engine](#) | [Writing Centers at University of Toronto](#) |



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Access the ECO 204 calendar through Google

Join the Micro in the News and Academics Group @ Facebook

Course Announcements

Last Update: Tuesday, May 22, 2012. It is your responsibility to regularly check announcements posted here and/or Twitter (follow @ajazeco204)

- HW 2 has been posted. See [Detailed Course Plan](#)
- Test 2 and 3 locations have been posted. Please see [Detailed Course Plan](#)

Course Description

The Economics department (STG) offers three intermediate level microeconomics courses: ECO 200 for Economics majors; ECO 204 for students in the [Rotman Commerce](#) program (a joint program between [Rotman School of Management](#) and the [Faculty of Arts and Sciences](#)); and ECO 206 for Economics Specialists and Commerce students. In deference to the Commerce student audience, ECO 204 has two main goals: first, to provide Commerce students with a solid foundation of rigorous microeconomic theory and mathematical methods; second, to develop Commerce students' business and economic analytical skills (mostly) through Harvard Business School case analysis and hone students' writing and Excel modeling skills through projects, papers, data collection and analysis, and Excel modeling (especially Solver).

We will cover the following topics in microeconomics at an intermediate level: consumer theory; decision making under uncertainty; financial portfolio analysis; producer theory; cost analysis; econometrics (demand and cost functions); firms in competitive markets; firm(s) in highly concentrated markets; price discrimination; economics of information; and game theory. We will learn and use the following mathematical and statistical methods: multivariate calculus, integration, unconstrained optimization, equality and inequality constrained optimization; envelope theorem; probability theory; and simple regression analysis. We will analyze the following problems in the HBS cases: optimal pricing scheme with constraints; cost function estimation and analysis (including activity based cost accounting methods); opportunity cost based accounting methods; designing and implementing price discrimination schemes; forecasting pricing scenarios due to future entrants; and constructing a competitive market supply “curve” from firms’ cost data.

Tips on doing well in ECO 204: By its very nature, microeconomics consists of hundreds of interconnected concepts (“micro” = “small”). As such, microeconomic theory, models and techniques take time to master and because many models are intertwined, you will need time to master each model and linkages with other models. This means you cannot do well in tests and exams by studying the week before tests and exams. Rather, you should study on a continuous basis and recognize that in a second year university course there is no substitute for *self-learning* (gone are the days of spoon feeding). Some specific tips:

- Attend every lecture and tutorial.
- Print lecture slides. Don’t treat lecture slides as class notes; rather, lecture slides are teaching aids and you should be taking your own class notes.
- After each lecture, go over the slides and your class notes and try to *understand* the material (the best way to do so is by explaining to someone else).
- HWs are designed to reinforce and extend lecture material. Attempt the HW before tutorials. If you get stuck, go back to your slides/notes and try to fill gaps in your understanding. Don’t despair if you can’t solve the HW problems – having attempted it and reviewing slides/notes will be beneficial when the TA solves the HW in the tutorial because you will have a deeper understanding of the material and where you went wrong (which also tells you how you can improve your study habits).
- Never cram for a test. You need to study continuously and on a regular basis to comprehend the subtleties and understand the connections with other models and methods.
- ECO 204 tests do not use questions from previous tests. ECO 204 tests and exams questions are designed to test your understanding of the material and techniques. Try to develop intuition for models, methods and results and develop a “micro thinking cap”. You’ll be tested on whether you can apply concepts and techniques to problems you’ve never seen before and memorizing solutions to previous problems won’t give you the tools to solve new problems. In this respect, HW and practice problems are critical for success in ECO 204 bearing in mind Jenn Murdock’s advice to students:

“Inappropriate use of the solutions is dangerous for your marks. Assigned problems are designed to help you build skills and to deepen your understanding of the course material. One important skill is being able to figure out a solution approach to a problem that you have not seen before. This skill is routinely tested. By looking at the solutions before you have made every effort to solve the problem yourself, including going back to study your lecture notes and the textbook, you are robbing yourself of a valuable opportunity to practice. After you finish a problem, look at the question again and your answer and think about how this fits into the course, what concepts you used and what assumptions you made”. [Source]

Course Staff, Office, Office Hours, Lecture & Tutorial Locations

For all “administrative” matters please contact the Course Coordinator	
Instructor: <u>Ajaz Hussain</u>	Tutorials TA: Adam Lavecchia Course Coordinator: <u>Rita Pivovarova</u>
Office Hours: Tuesdays, 3 – 5 pm in <u>GE 212</u> Please check <u>course schedule</u> for any changes	Office Hours: Wed 11 am - 1 pm Please check <u>course schedule</u> for any changes
Office: <u>GE 212</u> , Economics Department, 150 St. George Street	Office: <u>GE 213</u> , Economics Department, 150 St. George Street
Phone #: +1 – 416 – 978 – 4965 It’s best to contact Ajaz by e-mail	ECO 204 Phone #: +1 – 617 – 855 – 8204
E-mail: <u>sayed.hussain@utoronto.ca</u>	Course Coordinator E-mail: <u>Economics204@gmail.com</u>
Lectures: Tuesdays & Thursdays, 11 am – 2 pm in <u>MP 203</u> Attendance is mandatory Audio and video recordings are NOT permitted	Tutorials: Fridays, 11 am – 2 pm in <u>MP 203</u> Attendance is mandatory
Lectures and tutorials will be at least 2 hours with a 5-minute break <i>or</i> at most 3 hours with two 5-minute breaks.	

E-mail Policy

For all “administrative” matters please contact the Course Coordinator through e-mail Economics204@gmail.com. Email is **not** an appropriate forum for discussing details which is why we have set aside office hours. That said, email can be helpful on occasion, and within limits. Accordingly, we will endeavour to reply to email within 24 hours, except on weekends, with the following provisions:

The question should require a one (or two) sentence response (maximum). If it takes more, office hours are the more appropriate venue;

- We won't answer questions about Excel (or computing more generally). Such questions should be discussed in office hours.
- We won't answer emails requesting information that can be found on the website or the syllabus;
- We will not reply to emails concerning grading. For such matters, office hours are more appropriate.

It is also (strongly) preferable that you use a UToronto email address: University policy stipulates a preference for these email addresses. Always identify yourself in your email; please do not send attachments of any kind; and please do not submit term work by email.

Course Material

ECO 204 Lecture Slides [Required]

- Posted in [course plan](#) section below by midnight before Tuesday and Thursday lectures
- You are expected to print and bring lecture slides to class in order to take notes.
- You can choose the number of slides per page to be printed by going to [Print](#) → [Print Properties](#)
- [Optional] Useful site for plots and calculations (equations, algebra, matrices, derivatives, integrals, etc.): [Wolfram Alpha](#)

ECO 204 HWs [Required]

- Posted in [course plan](#) section below by midnight after Tuesday lecture.
- HWs are not graded.
- Solutions will not be distributed but the TA will go over the HW solutions in the tutorial sections.
- You should re-read the lectures and then attempt the HWs *before* the tutorials. Resist the temptation to go to the tutorial and copy down solutions – this won't deepen your understanding of the material and is a sure way to do poorly in the course.

ECO 204 Textbook Chapters [Required]

- Posted here and in [course plan](#) section below on a rolling basis
- The chapters contain practice problems with highly detailed step by step solutions
- [Optional] Useful site for plots and calculations (equations, algebra, matrices, derivatives, integrals, etc.): [Wolfram Alpha](#)

ECO 204 Excel Model [Required]

- Posted in [course plan](#) section below and continuously updated
- Please “enable macros” if prompted
- We *highly* recommend using Excel 2010 on Windows
- Please add-in the Developer Tab and Data Analysis (VBA) and Solver tools ([instructions](#))
- Having problems downloading the Excel Model?
 - Solution 1: Don't use Microsoft's Internet Explorer; instead try using another browser such as [Firefox](#).
 - Solution 2: Download the file and change the file extension from .zip to .xlsm. For example if the file name reads model.zip click on the file name once, and change ".zip" to ".xlsm".

Harvard Business School (HBS) Cases [Required]

The following cases can be purchased from [Harvard Business School Press](http://www.harvardbusinesspress.com) . Go to <http://cb.hbsp.harvard.edu/cb/access/13741472> → register as a student → pay by credit card → download files to your computer

- *Case Analysis Coach* (online case)
- *The Use and Abuse of Analogies*
- *The Prestige Telephone Company* (comes with Excel data supplement)
- *Container Transportation Company*
- *Accounting for Frequent Fliers*
 - [Washington Post article with a “value” for frequent flier miles](#)
- *DHL Worldwide Express*
- *Bittersweet Competition: Holland Sweetener Company vs. Nutrasweet* (A)
- *The Aluminum Industry in 1994*
 - [Excel file with cost data for the 157 primary aluminum smelters in the case](#) (password: quasifixed)

Supplementary Material [Optional]

Note: Test and exam questions will *not* be drawn from supplementary materials

- [Introduction to Economic Analysis](#) (free)
- [Applied Theory of Price](#) (free)
- [Martin Osborne’s Math Tutorial](#)
- [Economist Magazine Style Guide](#)
- [The Elements of Style](#)
- [The Case Study Handbook](#)

Course Evaluation

<p>Test 1 = 15% See note at the end of this table</p>	<p>Test 1 Tuesday, June 5th , 11 am – 1 pm in MP 203 Please see policies on missed tests <u>below</u>.</p>
<p>Test 2 = 15% See note at the end of this table.</p>	<p>Test 2 Friday, July 6th , 6 - 8 pm in SF 3202 (Sandford Fleming) Please see policies on missed tests <u>below</u></p>
<p>Test 3 = 15% See note at the end of this table.</p>	<p>Test 3 Friday, July 27th, 6 - 8 pm in SF 3202 (Sandford Fleming) Please see policies on missed tests <u>below</u></p>
<p>Project 1 = 2% Individual Paper</p>	<p>Project 1 Posted June 1. Individual Paper(2 to 3 pages). Two drafts. Please see detailed instructions <u>below</u> 1st Draft</p>

	<p>1st draft isn't graded. Instead, feedback will be provided to you which you are expected to incorporate in the 2nd draft Due by 11 pm June 15th through Assignment Tab in Blackboard</p> <p>2nd Draft 2nd draft graded (please incorporate feedback from the 1st draft). See Economist Magazine Style Guide Due by 11 pm June 22nd through Assignment Tab in Blackboard and turnitin.com (Class ID: 5101717, pw: quasi2012) Please see Turnitin disclaimer policy below</p>
<p>Project 2 = 3% Individual Excel Model</p>	<p>Project 2 Posted June 29. Excel Model. Please see detailed instructions below</p> <p>Due by 11 pm July 6th through Assignment Tab in Blackboard</p>
<p>Project 3 = 10% Individual Paper and Individual Excel Model</p>	<p>Project 3 Posted July 20th. Individual Excel Model and Paper (7 to 10 pages). Please see detailed instructions below</p> <p>Excel Model Due by 11 pm August 3rd through Assignment Tab in Blackboard</p> <p>Paper Due by 11 pm August 3rd through Assignment Tab in Blackboard and turnitin.com (Class ID: 5101717, pw: quasi2012) Please see Turnitin disclaimer policy below</p>
<p><u>Cumulative</u> Final Exam = 40% See note at the end of this table</p>	<p>Final Exam 3 hours long at time and location TBA by Faculty of Arts and Sciences</p>
<ul style="list-style-type: none"> ▪ The total sum of tests and the final exam is 85%. For the course mark calculation, we will allocate 60% of the 85% to the max(3 Tests, Final Exam) and 40% to the min(3 Tests, Final Exam) ▪ Procedures for appealing test marks are outlined here ▪ Procedures for appealing course marks are outlined here. For any questions and issues related to the final exam, please contact your college registrar. 	

Tests and Exam Policies

- The test & final exam dates, times, and locations are:
 - Test 1: Tuesday, June 5th , 11 am – 1 pm in MP 203
 - Test 2: Friday, July 6th , 6 - 8 pm in SF 3202 (Sandford Fleming)
 - Test 3: Friday, July 27th, 6 - 8 pm in SF 3202 (Sandford Fleming)
 - Final Exam: 3 hours long at time and location [TBA by Faculty of Arts and Sciences](#)
- If you have a direct conflict with a test, you must email the Course Coordinator one week before the test to make alternative arrangements (ex: take the test at an earlier time on the same day).
- Please bring a scientific calculator and your student ID to all tests and exams.

- All tests begin 10 minutes after the hour. For example, a 6 – 8 pm test will be from 6:10 – 8 pm.
- You must be in the exam room on time (ideally 10 minutes before the test starts). You will not be given extra time if you're late.
- During the test you must show your student ID and sign the "signup sheet".
- Stay seated until all tests have been collected and counted. You cannot leave the room in the last 10 minutes.
- It is your responsibility to write your name and ID # on tests as they appear in ROSI. Failure to do so will result in a 5% penalty per incident.
- You will be given a zero score on any missed test(s) unless you give the Course Coordinator an appropriate and convincing typed explanation or medical note within 3 calendar (not business) days of the missed test. Please e-mail the Course Coordinator at economics204@gmail.com for an appointment to submit the explanation/medical note.
- If you miss a test due to an illness then you must provide the Course Coordinator an original University of Toronto medical certificate (photocopies or emailed certificates will NOT be accepted). The note:
 - Must list the physician's OHIP number
 - Clearly state that on the date of the test you were too sick to write the test. Illness *before* the test is *not* sufficient grounds for missing the test nor are statements that you would have performed "sub-optimally".
 - To comply with these requirements, it is expected that you will have met with the doctor on the day of the test.
 - It is an academic offence to feign illness to avoid a test.
 - Notes from acupuncture clinics, chiropractors, "health care professionals", hair transplant clinics, veterinarians, etc. will **not** be accepted.
- The Course Coordinator and instructor will review the note and determine if you will be excused from missing the test. Part of this review process may include following up with the physician, your college registrar, or the undergraduate Chair.
- *If* you are excused for missing a test(s) then:
 - You must take a ½ hour oral test with the instructor and the Course Coordinator within one week (calendar week, not business days) of the missed test and 25% of the missed test score will be allocated to the oral test.
 - It is *your* responsibility to contact the Course Coordinator to make an appointment for the oral test.
 - You will take a single, comprehensive, cumulative make-up test on 4 -6 pm, Monday, August 13th in GE 212 and 75% of the missed test score will be allocated to the makeup test.
 - The makeup test will covers all material in the course up to the last lecture before the make-up test.
 - Makeup tests are not "bell curved".
 - Consistent with university policy, there is no "make-up" test for the make-up test. No medical excuses will be accepted for missing the makeup test and a grade of zero will be applied.
- Students can appeal test grades by typing up their reasons for a request using the electronically fillable Test Remark Request form and submitting the signed form stapled to the test in person to the Course Coordinator as soon as possible and at most *two weeks of the tests being returned to the class*. Please e-mail the Course Coordinator at economics204@gmail.com for an appointment to submit the form. Please note that following an appeal, your test score can increase, decrease, or stay the same.

Projects Policies

- Project 1:
 - Project 1 Instructions posted in detailed course plan below on June 1
 - Draft #1: Please submit paper through Blackboard's Assignment Tab by 11 pm June 15th
 - File *must* be named Lastname_Firstname
 - The first submission will not be graded but feedback will be provided which you must incorporate in the second submission
 - NOTE: If this preliminary draft is not submitted, you will receive a mark of zero (0) for this project.
 - Draft #2: Please submit paper through Blackboard's Assignment Tab **and** Turnitin.com (Class ID: 5101717, pw: quasi2012) by 11 pm June 22nd
 - File *must* be named Lastname_Firstname.pdf (or .doc, .docx)
 - You must include first draft along a one (1) page explanation of how you applied the critique to the first draft (the first draft and the explanation do not count towards the page length of the second draft). Papers submitted without these attachments will not be graded and you will receive a mark of zero (0) for the entire project
 - Penalty for late submissions: 25% penalty per day (for example, 1 day late → score lowered by 25%, 2 days late → score lowered by 50%)
 - Penalty for failure to write your name on the paper as it appears in ROSI: 5% penalty per incident.
 - Please see and use Economist Magazine Style Guide (see excerpts below). You are encouraged to use the Writing Centers at University of Toronto.
- Project 2:
 - Project 2 Instructions posted in detailed course plan below on June 29

- Please submit Excel model through the Assignment Tab in Blackboard by 11 pm July 6th
 - File *must* be named Lastname_Firstname.xlsx (or .xls, .xlsm)
 - Penalty for late submissions: 25% penalty per day (for example, 1 day late → score lowered by 25%, 2 days late → score lowered by 50%)
 - Penalty for failure to write your name on the paper as it appears in ROSI: 5% penalty per incident.
 - Grading rubric for Excel model TBA.
- Project 3:
 - Project 3 Instructions posted in [detailed course plan](#) below on July 20th
 - Please submit paper **and** Excel model through Blackboard's Assignment Tab by 11 pm August 3rd
 - Files *must* be named Lastname_Firstname
 - Please submit the paper (but not the Excel model) through [Turnitin](#) and [Turnitin.com](#) (Class ID: 5101717, pw: quasi2012) by 11 pm August 3rd
 - File *must* be named Lastname_Firstname
 - Penalty for late submissions: 25% penalty per day (for example, 1 day late → score lowered by 25%, 2 days late → score lowered by 50%)
 - Please see and use [Economist Magazine Style Guide](#) (see excerpts below). You are encouraged to use the [Writing Centers at University of Toronto](#).
- Students can appeal paper grades by typing up their reasons for a request using the electronically fillable [Test/Paper Remark Request form](#) and submitting the signed form in person to the Course Coordinator as soon as possible and at most *two weeks of the paper being returned to the class*. Please e-mail the Course Coordinator at economics204@gmail.com for an appointment to submit the form. Please note that following an appeal, your paper score can increase, decrease, or stay the same (according to University policy: “ .. such a request entails a remarking of the work. Hence, if a remarking is granted, the student must accept the resulting mark as the new mark, whether it goes up or down or remains the same. Continuing with the remark or the appeal means the student accepts this condition.”)
 - Disclaimer concerning Turnitin.com: *Students agree that by taking this course all required papers will be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.*
 - Some tips on good writing (courtesy of Avi Cohen and Andrea Williams): reproduced here is much of the *Style Guide* of [The Economist Magazine](#). *The Economist* is widely recognized as the world standard for economic journalism. The complete *Style Guide* is at <http://www.economist.com/styleguide/introduction>. I also recommend you read a few articles in *The Economist* to get a feel for their writing. Look at the Table of Contents of any issue to get a feel for catchy titles. The first requirement of *The Economist* is that it should be readily understandable.

Clarity of writing usually follows clarity of thought. So think what you want to say, then say it as simply as possible. Keep in mind George Orwell's six elementary rules ("[Politics and the English Language](#)", 1946):

- Never use a Metaphor, simile or other figure of speech which you are used to seeing in print.
- Never use a long word where a short one will do.
- If it is possible to cut out a word, always cut it out.
- Never use the Passive where you can use the active.
- Never use a foreign phrase, a scientific word or a Jargon word if you can think of an everyday English equivalent.
- Break any of these rules sooner than say anything outright barbarous.

Readers are primarily interested in what you have to say. By the way in which you say it you may encourage them either to read on or to give up. If you want them to read on: Do not be stuffy. “To write a genuine, familiar or truly English style”, said Hazlitt, “is to write as anyone would speak in common conversation who had a thorough command or choice of words or who could discourse with ease, force and perspicuity setting aside all pedantic and oratorical flourishes.”

Use the language of everyday speech, not that of spokesmen, lawyers or bureaucrats (so prefer *let* to *permit*, *people* to *persons*, *buy* to *purchase*, *colleague* to *peer*, *way out* to *exit*, *present* to *gift*, *rich* to *wealthy*, *show* to *demonstrate*, *break* to *violate*). Pomposity and long-windedness tend to obscure meaning, or reveal the lack of it: strip them away in favor of plain words. Do not be hectoring or arrogant. Those who disagree with you are not necessarily stupid or insane. Nobody needs to be described as silly: let your analysis show that (s)he is. When you express opinions, do not simply make assertions. The aim is not just to tell readers what you think, but to persuade them; if you use arguments, reasoning and evidence, you may succeed. Go easy on the *oughts* and *should*.

Do your best to be lucid (“I see but one rule: to be clear”, Stendhal). Simple sentences help. Keep complicated constructions and gimmicks to a minimum, if necessary by remembering the *New Yorker's* comment: “Backward ran

the sentences until reeled the mind.” Long paragraphs, like long sentences, can confuse the reader. “The paragraph”, according to Fowler, “is essentially a unit of thought, not of length; it must be homogeneous in subject matter and sequential in treatment.” One-sentence paragraphs should be used only occasionally. Clear thinking is the key to clear writing. “A scrupulous writer”, observed Orwell, “in every sentence that he writes will ask himself at least four questions, thus: What am I trying to say? What words will express it? What image or idiom will make it clearer? Is this image fresh enough to have an effect? And he will probably ask himself two more: Could I put it more shortly? Have I said anything that is avoidably ugly?” Scrupulous writers will also notice that their copy is edited only lightly and is likely to be used. It may even be read.

Given the short length of your papers compared to most academic papers, here are some additional writing tips:

- Make your main point early on; unlike an essay you don’t need a long introduction.
- Support each point with evidence, such as a statistic, example or economic reasoning.
- Make clear the economic concepts and reasoning on which your argument is based.

Academic Integrity

Academic integrity is one of the cornerstones of the University of Toronto. It is critically important both to maintain our community which honors the values of honesty, trust, respect, fairness and responsibility and to protect you, the students within this community, and the value of the degree towards which you are all working so diligently. According to Section B of the University of Toronto’s [Code of Behavior on Academic Matters](#) which all students are expected to know and respect, it is an offence for students:

- To obtain unauthorized assistance on any assignment. showing another student completed work (e.g., an answer in a test)
- To falsify or alter any documentation required by the University. This, includes, but is not limited to, doctor’s notes.
- To use or possess an unauthorized aid in any test or exam
- There are other offences covered under the Code but these are by far the most common. Please respect these rules and the values which they protect.

Some Past Tests & Final Exams

Past tests and exams are not representative of future tests and exams. Do not study for tests and exams solely on the basis of past tests and exams.

ECO 204 2011 - 2012

• [Test 1 \(Test 1 Solutions\)](#) • [Test 2 \(Test 2 Solutions\)](#) • [Test 3 \(Test 3 Solutions\)](#) • [Final Exam \(Solutions N/A\)](#)

ECO 204 Summer 2011

• [Test 1 \(Test 1 Solutions\)](#) • [Test 2 \(Test 2 Solutions\)](#) • [Test 3 \(Test 3 Solutions\)](#) • [Final Exam \(Solutions N/A\)](#)

ECO 204 2010 - 2011

• [Test 1 \(Test 1 Solutions\)](#) • [Test 2 \(Test 2 Solutions\)](#) • [Test 3 \(Test 3 Solutions\)](#) • [Final Exam \(Solutions N/A\)](#)

ECO 204 Summer 2010

• [Test 1 \(Test 1 Solutions\)](#) • [Test 2 \(Test 2 Solutions\)](#) • [Test 3 \(Test 3 Solutions\)](#) * [Final Exam \(Solutions N/A\)](#)

ECO 204 2009 - 2010

• [Test 1 \(Test 1 Solutions\)](#) • [Test 2 \(Test 2 Solutions\)](#) • [Test 3 \(Test 3 Solutions\)](#) • [Final Exam \(Solutions N/A\)](#)

ECO 204 Summer 2009

• [Test 1 \(Test 1 Solutions\)](#) • [Final Exam \(Solutions N/A\)](#)

ECO 204 2008 - 2009

• [Test 1 \(Test 1 Solutions\)](#) • [Test 2 \(Test 2 Solutions\)](#) • [Test 3 \(Test 3 Solutions\)](#) • [Test 4 \(Test 4 Solutions\)](#) • [Final Exam \(Solutions N/A\)](#)

