University of Toronto (St. George) Department of Economics

ECO 404: Topics in Managerial Economics - Winter 2020

6 - 9 pm, Mondays, SS 2111

Ajaz Hussain Office Hours: 3:30 – 5:30 pm, Tuesdays, GE 168 or 178 E-mail: sayed.hussain@utoronto.ca

COURSE DESCRIPTION, LEARNING OUTCOMES, PRE-REQUISITES

Students in this course will make group presentations -- and write individual papers -- on their "solutions" to quantitative managerial-economics cases. By the end of this course, students will be able to:

- Analyze, identify, formulate, articulate, and present a structured solution to the salient issue(s) in real life business-economics cases.
- Formulate appropriate econometric models to investigate particular business-economics hypotheses.
- Build models involving Monte-Carlo simulation, Optimization, and advanced Econometric methods.
- Work cooperatively in a small group environment
- Compose professional level presentations, quantitative models, and business reports.

Students must meet the pre-requisites listed at https://fas.calendar.utoronto.ca/course/ECO404H1: ECO200Y1(75%)/ ECO204Y1/ ECO206Y1; ECO220Y1/ ECO227Y1/ (STA220H1, STA255H1)/ (STA237H1, STA238H1)/ (STA257H1, STA261H1); ECO372H1/ ECO374H1/ ECO375H1; at least one FCE in ECO at the 300 level or higher). Please note that the Economics Department checks prerequisites requirements manually and will (ultimately) eject students who do not satisfy the prerequisites (i.e. being able to register for this course on ACORN doesn't mean that you have satisfied all prerequisites).

ECO 404 Winter 2020 Course Material

[Required] ECO 404 Cases

"Cases" will be posted on the ECO 404 website or available for purchase from the Harvard Business School Press website (students will be notified through Quercus).

[Required] Excel 2016 or later with the following add-ons (please note that some of the following add-ins don't work on Apple machines (including Apple machines with Windows-OS)):

- 1. "Solver add-in"
- 2. "Data Analysis add-in"
- 3. "FRED Excel Add-in"
- 4. "Monte-Carlo Simulations Add-in"

[Required] "Econometrics software" (such as <u>Stat-tools</u>, Python, Stata, Matlab, R). We highly-recommended: Stat-tools available for \$50 at http://www.palisade.com/

[Highly Recommended] Ajaz's Excel & Stat-tool video-lessons on YouTube

	Course Plan and Grading Schen	,		. ,		
January 6 th	Introduction. Students assigned into groups for "Round 1 Presentations"					
January 13 th	Group A Case 1 Solution (5%) 15-min group presentation followed by Q&A	Group B Case 1 Summary (Each group member to submit 1-page memo)	Group C Case 2 Solution 15-min group presentation followed by Q&A	Group D Case 2 Summary (Each group member to submit 1-page memo)		
January 20 th	Group A Case 1 Solution (10%) 25-min group presentation followed by Q&A	Group B Case 1 Paper (Each group member to submit 10-page paper)	Group C Case 2 Solution 25-min group presentation followed by Q&A	Group D Case 2 Paper (Each group member to submit 10-page paper)		
January 27 th	Group A Case 3 Summary (5%) (Each group member to submit 1-page memo)	Group B Case 3 Solution 15-min group presentation followed by Q&A	Group C Case 4 Summary (Each group member to submit 1-page memo)	Group D Case 4 Solution 15-min group presentatior followed by Q&A		
February 3 rd	Group A Case 3 Paper (10%) (Each group member to submit 10-page paper)	Group B Case 3 Solution 25-min presentation followed by Q&A	Group C Case 4 Paper (Each group member to submit 10-page paper)	Group D Case 4 Solution 25-min presentation followed by Q&A		
February 10 th	In Class "Case Analysis" Midterm Test (please bring laptop pre-loaded with required software) (20%) Students re-shuffled and assigned into new groups for "Round 2 Presentations"					
February 24 th	Group A Case 5 Solution (5%) 15-min group presentation followed by Q&A	Group B Case 5 Summary (Each group member to submit 1-page memo)	Group C Case 6 Solution 15-min group presentation followed by Q&A	Group D Case 6 Summary (Each group member to submit 1-page memo)		
March 3 rd	Group A Case 5 Solution (10%) 25-min group presentation followed by Q&A	Group B Case 5 Paper (Each group member to submit 10-page paper)	Group C Case 6 Solution 25-min group presentation followed by Q&A	Group D Case 6 Paper (Each group member to submit 10-page paper)		
March 9 th	Group A Case 7 Summary (5%) (Each group member to submit 1-page memo)	Group B Case 7 Solution 15-min group presentation followed by Q&A	Group C Case 8 Summary (Each group member to submit 1-page memo)	Group D Case 8 Solution 15-min group presentatior followed by Q&A		
March 16 th	Group A Case 7 Paper (10%) (Each group member to submit 10-page paper)	Group B Case 7 Solution 25-min group presentation followed by Q&A	Group C Case 8 Paper (Each group member to submit 10-page paper)	Group D Case 8 Solution 25-min group presentation followed by Q&A		
	Students re-shu	ffled and assigned into new gro	oups for "Round 3 Presentation	ns"		
March 23 rd	Group A Case 9 Solution (10%) 25-min group presentation followed by Q&A	Group B Case 9 Solution 25-min group presentation followed by Q&A	Group C Case 9 Solution 25-min group presentation followed by Q&A	Group D Case 9 Solution 25-min group presentation followed by Q&A		
	Students re-shu	ffled and assigned into new gro	oups for "Round 4 Presentation	ns"		
March 30 th	Group A Case 10 Solution (10%) 25-min group presentation followed by Q&A	Group B Case 10 Solution 25-min group presentation followed by Q&A	Group C Case 10 Solution 25-min group presentation followed by Q&A	Group D Case 10 Solution 25-min group presentatior followed by Q&A		

Course Policies

- Please bring a laptop with required software and cases to lectures.
- "Group Presentations": All members of the assigned group will <u>present</u> their analysis of the assigned case in a 'power point group presentation'. See "group presentation" rubric and guidelines below.
- "Group Presentation Q&A": Following a group presentation, there will be a "Q&A" session with each member of the assigned group on the assigned case.
- "Individual "Solo" Memo": Each member of the assigned group will write their own one-page memo summarizing the assigned case.
- "Individual "Solo" Paper": Each member of the assigned group will write a (max) 10-page individual paper with their analysis of the assigned case. See "solo paper" rubric and guidelines below
- Penalty for missing a class in which you were supposed to submit a one-page summary memo 5% of the course grade: Prior to 11:59 PM EST of the lecture (no later): send an e-mail from your U of T e-mail address with the subject line "ECO 404, Winter 2020 Missed Lecture" to saved.hussain@utoronto.ca and:
 - o State your full legal name and student ID number
 - Provide an explanation for why you missed the class and request to write a 10-page paper on a makeup-case assigned by the instructor. You must request the makeup case from the instructor by e-mail within five business days of the missed class and submit the paper by e-mail within five business days of the instructor e-mailing the makeup class to you. Please submit documentation for your request to Ajaz ("instructor") in person before/after class or during office hours.
 - If you missed class because of *short-term illness*, please submit an original, completed, official <u>UofT Verification of Student Illness or Injury form completed</u> by a Physician, Surgeon, Nurse Practitioner, Registered Psychologist or Dentist registered and licensed in Ontario (they should have seen you *on the class date or before*. In their medical opinion, you should be *unable* to attend class).
 - If you have a long-term medical issue or have a non-medical issue: please have your college Registrar to send an email to <u>sayed.hussain@utoronto.ca</u> requesting the make-up paper on your behalf. Please contact them as soon as you know you will miss class and provide them with the appropriate documentation.
 - Conclude your explanation by including 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".
- Penalty for missing a class in which you were supposed to do a group presentation full presentation mark. Prior to 11:59 PM EST of the lecture (no later): send an e-mail *from* your U of T e-mail address with the subject line "ECO 404, Winter 2020 Missed Presentation" to sayed.hussain@utoronto.ca and:
 - State your full legal name and student ID number
 - Provide an explanation for why you missed the class and request to write a 25-page paper on a makeup-case assigned by the instructor. You must request the makeup case from the instructor by e-mail within five business days of the missed class and submit the paper by e-mail within five business days of the instructor e-mailing the makeup class to you. Please submit documentation for your request to Ajaz ("instructor") in person before/after class or during office hours.
 - If you missed class because of short-term illness, please submit an original, completed, official <u>UofT Verification of Student Illness or Injury form</u> completed by a Physician, Surgeon, Nurse Practitioner, Registered Psychologist or Dentist registered and licensed in Ontario (they should have seen you on the class date or before. In their medical opinion, you should be unable to attend class).

- If you have a long-term medical issue or have a non-medical issue: please have your college Registrar to send an email to <u>sayed.hussain@utoronto.ca</u> requesting the make-up paper on your behalf. Please contact them as soon as you know you will miss class and provide them with the appropriate documentation.
- Conclude your explanation by including 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".
- Penalty for missing the midterm test 20% of the course grade: Prior to 11:59 PM EST on the test date (no later): send an e-mail *from* your U of T e-mail address with the subject line "ECO 404, Winter 2020 Missed Midterm Test" to saved.hussain@utoronto.ca and:
 - o State your full legal name and student ID number
 - Provide an explanation for why you missed the test and request to take the make-up test from 4 7 pm on Friday, February 14, 2020. If you don't take the makeup test then you will get a score of zero for the missed test.
 - Conclude your explanation by including 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".

Within ten days of the missed test: submit documentation for your request to Ajaz ("instructor") in person before/after class or during office hours.

- o If you missed the test because of short-term illness, please submit an original, completed, official <u>UofT Verification of Student Illness or Injury form completed</u> by a Physician, Surgeon, Nurse Practitioner, Registered Psychologist or Dentist registered and licensed in Ontario (they should have seen you on the test date or before. In their medical opinion, you should be unable to write the test).
- o If you have a long-term medical issue or have a non-medical issue: please have your *college Registrar* to send an email to sayed.hussain@utoronto.ca requesting a make-up on your behalf. Please contact them as soon as you know you will miss the test and provide them with the appropriate documentation.
- As per university policy, there is no make-up for the make-up test. You will get zero if you miss the make-up test. The final decision to accept any excuse lies with the instructor or the Undergraduate Chair. You may get your grades for the make-up after the drop deadline. The makeup test format will be different from the regular test.
- "Turnitin": Please note that all student submissions ("group summary slides", "group presentation slides and backup files", "papers", "summary memos", and "test answers") will be submitted to Turnitin.com. In particular, please note the following statement on "essays" submitted to Turnitin.com: "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".

GROUP PRESENTATION RUBRIC							
	Excellent	Good	Fair	Problematic			
Score:	3	2	1	0			
Case Analysis: Arguments, Evidence, Understanding	Clearly identifies salient issue[s] in case. Effective and forceful arguments based on solid economic and (if applicable) econometric analysis. Demonstrates sound understanding of issues and economic/econometric concepts. Clear recommendations and/or findings.	Adequate identification of salient issue[s] in case. Somewhat effective arguments based on adequate use of economic and (if applicable) econometric analysis. Demonstrates adequate understanding of issues and economic/econometric concepts. Adequate recommendations and/or findings.	Inadequate identification of salient issue[s] in case. Poor and/or invalid arguments based on sparse use of economic and (if applicable) econometric analysis. Demonstrates inadequate and/or confused understanding of issues and economic/econometric concepts. Inadequate recommendations and/or findings	Misidentifies salient issue[s] in case. Incorrect arguments which are not based on economic and (if applicable) econometric analysis. Demonstrates little to no understanding of issues and economic/econometric concepts. Lacks recommendations and/or findings			
Organization & Flow: Clarity, Conciseness, Structure, Flow, Grammar, Interest to Audience	Presentation has excellent structure and flow. Slides are properly formatted and titled, and effectively and succinctly convey information and/or arguments. Data and econometric analysis (if applicable) presented clearly and effectively. Clear, effective tables, graphs, charts, etc. Excellent backup slides for the Q&A session effectively demonstrating "behind the scenes" analysis. Minimal (if any) errors.	Presentation has less than stellar structure and flow. Some issues with formatting and titles. Slides inadequately convey information and/or arguments. Inadequate presentation of data and econometric analysis (if applicable). Ineffective use of tables, graphs, charts, etc. Backup slides inadequate for Q&A session and ineffectively demonstrating "behind the scenes" analysis. A few minor errors.	Presentation has poor structure and flow. Major issues with formatting and titles. Slides fail to adequately convey information and/or arguments. Data and econometric analysis (if applicable) shoddily presented. Poorly organized tables, graphs, charts, etc. Backup slides completely inadequate for Q&A session and for demonstrating "behind the scenes" analysis. Many minor errors.	Presentation lacks structure and flow. Lots of major issues with formatting and titles. Slides do not convey information and/or argument. Data and econometric analysis (if any) poorly or not presented. Poor, ineffective, use of tables, graphs, charts, etc. No backup slides for demonstrating "behind the scenes" analysis. Many major errors.			

Here is a recommended (<u>loose</u>) template for presentations:

- Introduction and opening remarks ("statement of the central issue(s)")
- Agenda
- Overview & Background
- [If applicable] Data description with summary stats, graphs, and charts
- Analysis (please list regressions in a single table and report t-stats and/or p-values). Here is an <u>excellent example</u>.
- Recommendations/conclusion
- Backup slides and models (you should be able to bring these up in real time)
- You cannot "go outside" the case; i.e. stick to the facts and data in the case.

Prior the presentation, the assigned group must upload the slide deck and all backup files to "Quercus" (one submission per group). Please name all files as "CASE_TITLE_LAST_NAMES_OF_GROUP_MEMBERS" and list the names of all group members on the title slide/worksheet.

SOLO PAPER RUBRIC								
	Excellent	Good	Fair	Problematic				
Score:	3	2	1	0				
Economic Argument, Concepts & Evidence	Clearly stated argument & concepts. Economic reasoning is sound and indicates thorough understanding of concepts discussed in class.	Fairly clear and convincing argument. Adequate use of economic concepts. Demonstrates understanding of topics discussed in class.	Argument is confusing or contradictory. Weak definition/application of economic concepts. Demonstrates some understanding of topics discussed in class.	No clear argument. Confused or no use of economic concepts. Poor quality and little if any displayed evidence of understanding of topics discussed in class.				
Organization & Flow	Each main point is written in a separate paragraph, in a logical order. Article closes with a clear and convincing call to action.	Each reason is written in paragraphs, but not necessarily separate. Closing gives a fairly clear and convincing call to action.	Reasons are not written in distinct paragraphs. Closing gives a call to action, although not well supported.	Reasons are not written in good paragraphs and have questionable order. No clear or convincing call to action at close.				
Writing, Clarity, Conciseness, Sentence Structure, Grammar, Active Voice, interest to Reader	Easy to read, even for a non-specialist. Writing enhances understanding and interest. Short, clear, correctly structured sentences with active voice throughout. Minimal (if any) errors.	Mostly easy to read. Mostly short, clear, correctly structured sentences with active voice. A few minor errors.	Sentence/word level problems get in the way of understanding, distracting reader in places. Some passive voice and/or jargon.	Significant sentence/word level problems make it difficult for reader to understand argument. Considerable passive voice and/or jargon.				

Solo paper: maximum 10 pages (excluding title page, appendices, and bibliography)

The "solo papers" are "individual assignments" and therefore it is an academic offense to, amongst other factors, take help from anyone else (see Code of Behavior on Academic Matters). Here's a recommended Loose template for the paper:

- Introduction and opening remarks ("statement of the central issue(s)")
- Agenda
- Overview & Background
- [If applicable] Data description with summary stats, graphs, and charts
- Analysis (please list regressions in a single table and report t-stats and/or p-values). Here is an <u>excellent</u> example.
- Recommendations/conclusion
- Highly recommended "style guides": Economist Magazine Style Guide and The Elements of Style

Prior to the group presentation, the assigned students must upload their paper and all backup files to "Quercus" (one submission per student) by naming the files "CASE_TITLE_LAST_NAME". Please list your name on the title slide/worksheet.