

Economics 300: Honors Seminar in Economics Academic Year 2015-2016

Professor Jere R. Behrman
10 September 2015

e-mail: jbehrman@econ.upenn.edu Start subject line with “ECON 300” and then your surname on all e-mails to me.

Dropbox: Students in the course have been invited to a dropbox folder entitled “ECON 300” that will be used for various course materials. For materials that you deposit in dropbox (see below) always put them in the correct folder as indicated below and name the files with your surname first and then the topic of the file (as indicated below). When you open a file in dropbox, please remember to close it so we can avoid “conflicted” copies. Feel free to copy the papers from dropbox, but be sure to copy and not to move.

Office Hours in McNeil 229 (or right after class) by Appointment: If you want an appointment, please send me e-mail with several time options and an indication of why you want to meet.

Class meetings: Generally 3:30-6:30 pm on Wednesdays in McNeil 169 (individual meetings in McNeil 229 or right after class in McNeil 169). We usually will meet as a class in three groups in order to facilitate discussion and interaction within class, though the number of groups depends on the enrollment. The third group is a fast track group that will move at a somewhat faster pace which may be advantageous for some students if they want, e.g., to use their paper as part of the basis for Ph.D. applications in December or for me writing a letter for such applications. In the dates given below the first date is for the first group, the second date is for the second group, and the third date is for the third group.

Assignments (More Details Below)	Group 1	Group 2	Group 3
First Class	26 August 2015		
Oral Presentation Assignment 1 (Previous Thesis)	2 September 2015	9 September 2015	8 September 2015
Individual Appointments (Your Topic) [Signup in dropbox file ECON 300 Individual Appointments]	23 and 30 September 2015		14, 16 and 17 September 2015
Tentative Bibliography	14 October 2015		30 September 2015
Oral Presentation Assignment 2 (Article Related to Your Topic)	21 October 2015 3:30	28 October 2015 3:30	23 September 2015 4:30 pm
Written Thesis Proposal	9 November 2015		14 October 2015
Oral Presentation Assignment 3 (Thesis Outline)	10 November 2015 3:30	18 November 2015 3:30	14 October 2015 3:30
Literature Review	21 December 2015		18 November 2015
Oral Presentation Assignment 4 (Work in Progress)	20 January 2016 3:30	27 January 2016 3:30	18 November 2015 5:00
Introduction and Outline	17 February 2016		18 November 2015
Oral Presentation Assignment 5 (Work in Progress)	16 March 2016 3:30	23 March 2016 3:30	3 February 2015 3:30
Oral Presentation Assignment 6 (Final Oral Presentation)	13 April 2016 3:30	20 April 2016 3:30	23 March 2016 5:00
Final Written Submission of Thesis, Academic Integrity Statement	1 May 2016		

If you have a preference for which group you are in, put your name in that group in the excel file entitled “ECON 300 Groups 1 and 2 and 3)” in dropbox before 26 August 2015. The first eight or nine (or possibly ten, depending on the final class size) who sign up for each group will be in that group. Students who do not sign up before 26 August will be randomly assigned to vacancies in the first two groups.

General Information: This course is a seminar in which advanced undergraduate economics students learn how to do research by reading and discussing recent research in economics and by applying research methods in writing a senior honors essay. This is a single course that meets for two semesters and counts as two course units. ECON 300 counts as only one course toward the major, and may count toward one of the four 200-level course requirements. Consequently, honors majors have eleven economics course units. (The Economics GPA is based on economics courses.) Enrollment in ECON 300 is only possible with the permission of the instructor. As a guideline for admission, students should have taken ECON 101, 102, 103, 104 (ECON 104 may be taken concurrently in the Fall), and two 200-level economics courses with an Economics GPA of at least 3.5. Enrollment in the Honors Seminar is during the Fall semester only. Credit is awarded only upon completion of both semesters of ECON 300. Students who do not enroll in and complete the second semester of the Honors Seminar do not receive credit for the first semester. Grades are based on the quality of the honors paper, on oral presentations and on classroom participation.

A senior honors essay is a major research paper, with the text approximately 20-30 single-spaced pages with tables and figures and with citations to the literature in a standard reference style, which makes some original contribution either to economic theory or to the accumulation of empirical knowledge. The paper may, for example, propose and implement an empirical test for an existing economic hypothesis or it may offer a new explanation for some economic phenomenon. The paper topic is chosen by you with guidance from me in choosing one that is manageable. You will be assigned a professor generally in the economics department to serve as an advisor in addition to me, most likely one of the members of the Honors Thesis Committee (Lucca Bossi, Ken Burdett, Hal Cole, Dirk Krueger (ex officio and chair), Steve Matthews, Guido Menzio, Andy Postlewaite, Rebecca Stein) but possibly someone else in economics or in some cases outside of economics who seems a good match for your interests, perhaps in part because of your previous experience with particular faculty members.

To receive honors in the economics major, you need grades of B- or better on the essay and in the economics seminar itself. You also need a GPA of 3.5 in your economics courses.

Requirements: You will be expected to complete assignments on time (see below) and to participate in class discussions. You will be expected to meet deadlines in submitting thesis outlines and drafts, to make oral comments on presentations of peers in the class (particularly as a Designated Peer Commentator), to make oral presentations to other members of the seminar about your work in progress and to give a final presentation of your completed paper. You will also be asked to serve as a Designated Peer Commentator on presentations of two other classmates.

Grading: Your grade is determined by the quality of your honors essay, the quality of your presentations and your participation in the class. The essay is graded by me in consultation with your advisor. Approximately 80% of your grade will be based on the essay and 20% on class presentations and participation in class including your role as a Designated Peer Commentator on two classmates' presentations (see below).

Types of Essays: In principle, there are two options. But almost all, perhaps all, students will select the first option because, given their backgrounds, the second option is likely to be too challenging.

1. *An empirical essay:* For this type of essay, you develop an empirical question, either one that you take from the literature or one that you develop, and you use data to provide evidence about it. To answer your question of interest, you use economic models that help identify the important variables and how they interact. Data are analyzed using rigorous statistical methods, which means that you may have to learn on your own or through other mechanisms, if you do not know already, how to use some standard software for statistical analysis (e.g., Stata, EVIEWS, R). The data that you analyze can come from published sources or you can gather them yourself. Published data may be available on-line or you may have to enter

them yourself. Locating interesting data that can be used to investigate your question is a major component of your project, and you should not delay in attempting to find such data. For some possible data (e.g. if you collect primary data), Human Subjects and Institutional Review Board (IRB) approvals may be necessary (but not generally for de-identified public-use data that you can download from the web).

2. *A theoretical essay:* This type of essay develops an economic model to better understand some economic phenomenon. A theoretical essay should (1) motivate the need for the model and (2) discuss how your model differs from and improves on others in the literature as well as discuss its limitations. Naturally, any model you propose will be more convincing if you can also present some empirical support for it. You may use previously published tables or figures to support your model as long as they are cited correctly.

Steps in Writing the Essay:

1. *Search for a Topic:* Find a topic that is of interest to you, well-suited to your skills, and tractable within the time constraints of ECON 300 and your other commitments. You probably have many diverse interests, but it is important that you focus for this course on a well-defined and tractable topic. The titles of past papers (grouped by topic areas) in a word file in the dropbox entitled “ECON 300 Thesis Titles” might be useful to understand the range of past topics and possibilities for your study.

2. *Review Literature:* Do extensive reading in your area of interest and take notes on your readings. A section of your final thesis will be devoted to a discussion of the existing literature in your area and how your research contributes to it. A good place to start is with an intermediate-level economics textbook and with economics journals. Also, look through reading lists and class notes from your previous courses. Try to make your topic as focused as possible and plan your research strategy.

3. *Locate Data.* If you are doing an empirical study, find out what data sources are available to you. You may need to revise your topic because of data availability. Collecting your own data is an option, although you will need to carefully design the method by which you collect the data and may need Human Subjects and IRB approvals. For empirical work, you will also need to choose and to learn how to use the software for your data analysis. Empirical research should be carried out in a way that someone else could take the same data and replicate your results, so it is important to document how variables are created, etc. (this is usually done in a data appendix to the paper). Examine your data carefully to be sure that there are not peculiar variable values that probably reflect some data errors and, if ignored, could confound your analysis. Document decisions you make in analyzing your data (for example, how many observations are deleted because of missing values or do you impute missing values?).

4. *Develop Outline:* When you have a good idea of the main points you plan to make in the paper, write an outline of how they will be organized and try a rough draft of the introduction. As you learn more about your topic, refine your outline and introduction.

5. *Write Paper Components:* A good way to approach the writing of a large research paper is to view it as a collection of smaller 3-5 page essays (introduction, literature review, economic model, data sources and basic statistics, estimates, conclusion) linked together. Work towards completing each of these smaller essays one at a time and then tie them all together into one paper. Keep in mind that your first draft merely gets your ideas on paper and will be revised, probably a number of times. When you have finished presenting your empirical findings and/or economic models, draw thoughtful and honest conclusions from your work. The model you develop, the data that you use, and your estimation methods all will have limitations and you can suggest useful extensions to your research. Your empirical results may have turned out differently from your expectations or may seem counterintuitive. Whenever possible, turn adversity

into an advantage by learning the most you can from your findings. Discuss empirical results that are puzzling or contradict your economic model as well as those that support it. Important advances in economics have come about in trying to explain results that may at first seem puzzling.

Assignments Related to Writing the Essay (Tentative Dates in Brackets, with the First Date for students in Group 1, the Second Date for students in Group 2 for the Oral Presentations, and the Third Date for students in Group 3 for the Oral Presentations)

Fall Semester:

1. Oral Presentation Assignment 1: Oral presentation of a previous senior honors thesis [2, 9 and 8 September; put your slides in the dropbox folder “Presentation Slides/Group 1 or 2 (whichever you are in)/Oral Presentation Assignment 1” at least 18 hours in advance; name your file with your surname first and then “OPA 1”]. The class dropbox folder contains, inter alia, good papers from previous years (included individually by title and listed in word file entitled “ECON 300 Examples of Good Papers”. Pick a paper that you would like to present that still is available for your group (see last two columns in file entitled “ECON 300 Examples of Good Papers”) and put your name in the column for your group. (There are hard copies in my office of a number of other papers from past years available that you can see if you wish; please send me an e-mail if you are interested. The titles of these papers are grouped by topic areas in a word file also in the dropbox entitled “ECON 300 Thesis Titles” that you might find useful to browse to have an idea of the range of past topics.) For **Oral Presentation Assignment 1:** Make a 13-minute maximum oral presentation of a previous senior honors thesis in which you answer the following questions:

- a. What is the major question or issue addressed in the thesis?
- b. What economic theory or principles were used to address the issue?
- c. What data were used? What was the source of the data?
- d. What was the empirical approach or estimation method employed? Examples might be comparing means, analysis of variance, regression analysis.
- e. What were the major findings?

The oral presentation should have one slide for each of the above five questions.

2. Choose a topic [individual discussions 23 and 30 September for Groups 1 and 2: 14, 16, 17 for Group 3– students in each group can sign up in excel spreadsheet in dropbox entitled “ECON 300 Individual Appointments” or by appointment; put file with paragraph with idea and how you would approach it by 9:00 am the day we meet in dropbox folder “Submissions/Initial Idea/ Group 1 or 2 or 3 (whichever you are in); name your file with your surname first and then “Initial Idea”]

3. Tentative bibliography [put file with tentative bibliography by 9:00 am on October 14 in dropbox folder “Submissions/Tentative Bibliography/ Group 1 or 2 (whichever you are in) or by 9:00 am on 30 September 2015 for Group 3; name your file with your surname first and then “Tentative Bibliography”]

4. Oral Presentation Assignment 2: Oral presentation of a paper in the literature on your topic [21 and 28 October and 23 September 2015 for respective groups; put slides in the dropbox folder “Presentation Slides/Group 1 or 2 (whichever you are in)/Oral Presentation Assignment 2” at least 18

hours in advance; name your file with your surname first and then “OPA 2”]. For **Oral Presentation Assignment 2**: Choose one paper you have read, preferably published in an economics journal, related to your topic and summarize it in a 13-minute maximum oral presentation by answering the following questions.

- a. What is the major question or issue addressed in the paper?
- b. What economic theory or principles were used to address the issue?
- c. What data were used? What was the source of the data?
- d. What was the empirical approach or estimation method employed? Examples might be comparing means, analysis of variance, regression analysis.
- e. What were the major findings?
- f. How is this paper related to the topic of your senior thesis.

5. Written thesis proposal (objective (question, hypothesis), model, and research plan, including data sources and contemplated analysis) – maximum of four pages (put file with tentative bibliography by 5:00 pm on 10 November in dropbox folder “Submissions/Thesis Proposal/ Group 1 or 2 (whichever you are in) or by 5:00 pm on 14 October 2015 for Group 3; name your file with your surname first and then “Thesis Proposal”)

6. Oral Presentation Assignment 3: Oral thesis proposal (Oral Presentation Assignment 3 below) [11 and 18 November and 14 October 2015 for Group 3; put slides in the dropbox folder “Presentation Slides/Group 1 or 2 or 3 (whichever you are in)/Oral Presentation Assignment 3” at least 18 hours in advance; name your file with your surname first and then “OPA 3”]. For **Oral Presentation Assignment 3**: Give a 13-minute maximum oral presentation of your proposed thesis including the following:

- a. What is the major question or issue you plan on addressing?
- b. What is the motivation for the question?
- c. What economic theory or principles will you use to address the issue?
- d. What data source(s) are you planning to use?
- e. If possible, present some preliminary descriptive statistics (means, correlations, graphs) either from your data or from the literature that illustrates the issue.
- f. Describe briefly the type of analysis you plan on doing.

Your Designated Peer Commentator 1 will give ~3 minute discussion.

7. Complete literature review – maximum of 10 pages [put file with tentative bibliography by 6:00 pm on 21 December in dropbox folder “Submissions/Literature Review/Group 1 or 2 (whichever you are in) or by 6:00 pm on 18 November 2015 for Group 3; name your file with your surname first and then “Literature Review”]

Spring Semester for Groups 1 and 2, some Fall and some Spring for Group 3:

1. Oral Presentation Assignment 4: Oral presentation on thesis work in progress [20 and 27 January 2016 for Groups 1 and 2 and 18 November 2015 for Group 3; put slides in the dropbox folder “Presentation Slides/Group 1 or 2 or 3 (whichever you are in)/Oral Presentation Assignment 4” at least 18 hours in advance; name your file with your surname first and then “OPA 4”]. For your **Oral Presentation Assignment 4:** Give a 13-minute maximum oral presentation on your thesis work in progress: how have you advanced, what are preliminary results, what puzzles or problems have you encountered, what is next. Your Designated Peer Commentator 1 will give ~3 minute discussion.

2. Draft of Introduction and Outline: [put file with draft of your introduction and outline by 6:00 pm on 17 February 2016 in dropbox folder “Submissions/Introduction Outline/Group 1 or 2 (whichever you are in) or by 18 November 2015 for Group 3; name your file with your surname first and then “Introduction Outline”]

3. Oral Presentation Assignment 5: Oral presentation on thesis work in progress [March 16 and 23 and 3 February; put slides in the dropbox folder “Presentation Slides/Group 1 or 2 (whichever you are in)/Oral Presentation Assignment 5” at least 18 hours in advance; name your file with your surname first and then “OPA 5”]. For your **Oral Presentation Assignment 5:** Give a 13-minute maximum oral presentation on your thesis work in progress: how have you advanced, what are preliminary results, what puzzles or problems have you encountered, what is next. Your Designated Peer Commentator 2 will give ~3 minute discussion.

4. Oral Presentation Assignment 6: Final oral presentation [April 13 and 20 and 23 March 2016; put slides in the dropbox folder “Presentation Slides/Group 1 or 2 or 3 (whichever you are in)/Oral Presentation Assignment 6” at least 18 hours in advance; name your file with your surname first and then “OPA 6”]. For your **Oral Presentation Assignment 6:** Give a 13-minute maximum oral presentation on your thesis covering your motivation (question, hypothesis), literature review, model, data, results and conclusion. Your Designated Peer Commentator 2 will give ~3 minute discussion.

5. Final thesis: [put file with final thesis by 6:00 pm on 1 May in dropbox folder “Submissions/Final Thesis/Group 1 or 2 or 3 (whichever you are in); name your file with your surname first and then “Final Thesis”; also put file with scanned signed copy of academic integrity statement and confirmation of agreement to make your paper available to future students on cover page by 6:00 pm on 1 May in dropbox folder “Submissions/Academic Integrity/Group 1 or 2 or 3 (whichever you are in); name your file with your surname first and then “Academic Integrity” – or you may leave under my door signed academic integrity statement and confirmation of agreement to make your paper available to future students on cover page by 6:00 pm on 1 May.

Notes:

- 1) I will assign each student to be a Designated Peer Commentator 1 on another student’s presentations for Oral Presentation Assignments 3-4 and a Designated Peer Commentator 2 on yet another student’s presentations for Oral Presentation Assignments 5-6. This will enable each student to benefit from observations of peers and assure that each student is knowledgeable about and engaged in what peer students are doing. Designated Peer Commentators will be able to find the presentations on which they are commenting in the relevant dropbox folder.
- 2) Full class meetings are not scheduled for every Wednesday 3:30-6:30. Individual meetings will be scheduled from time to time on days on which there are not full class meetings.

- 3) You will be asked to confirm in writing on the cover sheet of your final paper, as noted above, that your paper can be used for future classes to illustrate what past students in the course have done (including for Oral Presentation Assignment 1 in future classes).
- 4) The deadlines are deadlines, not fuzzy “more-or-less” targets. You are welcome to submit before the deadlines. Late submissions either will receive no feedback or, if they are graded, be penalized 5% per 24 hours or portion thereof they are late. Please be respectful of your classmates, particularly your Designated Peer Commentators, by honoring the deadlines.

Academic Integrity: Academic integrity is a very important part of student life, and the Department of Economics takes it seriously. The department reserves the right to undertake procedures that would catch breaches of academic integrity, should any arise. Students who are suspected of committing infractions will be reported to the Office of Student Conduct. If a student is found in violation of academic integrity, it is at the professor's discretion to give the student a failing grade for the assignment and the course. You will be asked to confirm in writing that you have followed the strictures of academic integrity in preparing your own paper and in citing appropriately all sources that you have used on the cover page of your final submission.

Grant to Support Undergraduate Research (up to \$1,000): Here is an e-mail I received 20 July 2015 with a link to last year's announcement (due date last year 24 October 2014) that I understand will be updated soon: “Information about the College Alumni Society Research Grants can be found here: <http://www.upenn.edu/curf/research/grants/college-alumni-society-research-grant>. I am always more than happy to speak individually with any student who might have questions about these applications.” Ann Vernon-Grey, PhD, Associate Director for Undergraduate Research, Center for Undergraduate Research and Fellowships, The University of Pennsylvania, anneliza@upenn.edu. If you are interested, please check the URL to make sure it makes sense, check with Dr. Vernon-Grey to see if there is any update, and let me know (since I will have to write a letter of recommendation) in adequate time before the deadline.

Paper/Thesis Prizes: There are several thesis/paper prizes that have been won by ECON 300 papers in past years. I give the announcements for 2015 below because the 2016 announcements are not yet available. I am willing to consider nominating some of this year's theses for these prizes, though for the nominations to be most effective I will need to limit them to one or two possibilities among the students who are interested in each nomination. For the first two prizes below, polished theses must be ready by the time of the deadlines (that are before the course deadline for theses). For the third prize below, theses must be sufficiently advanced by late February 2016 to form a basis for recommendation to the faculty selection committee, though polished final versions are not necessary at that time.

1. Phi Beta Kappa Prizes (announcement for 2015):

“Phi Beta Kappa offers two essay prizes, the Elmaleh Prize (\$150) for an essay in the social sciences, and the Humanities Prize (\$150) for one in the humanities. Decisions are made in the spring, and students should submit their essays for consideration by April 17, 2015; senior theses are ineligible. There is no word count per se but essays should be fifteen or fewer pages.

Phi Beta Kappa awards three prizes for outstanding senior theses, also in the spring term. The Frederick W. Meier Jr. Thesis Prize (\$500) and two Phi Beta Kappa Thesis Prizes (\$300 each) are awarded for the best theses in any field.

Students or faculty may nominate a thesis (two copies), which must be accompanied by a letter of endorsement by a faculty advisor. For further information, contact Dr. Janet Tighe, 120 Cohen Hall, 215-898-6341, jtighe@sas.upenn.edu. Students are not required to be members of Phi Beta Kappa in order to receive these awards. All submissions should be handed to the receptionist in the College Office, 120 Cohen Hall.”

2. Penn’s Center for Undergraduate Research and Fellowships Graduating Senior Theses Awards (e-mail from 2015):

“each year Penn’s Center for Undergraduate Research and Fellowships (on behalf of the Provost’s Office) recognizes fifteen graduating seniors who have completed outstanding works of scholarship under the supervision of a Penn faculty member with the Rose Award (<http://www.upenn.edu/curf/research/grants/rose-award>). In addition, the Yardley Prize is awarded to the best thesis on political economy written by a member of the senior class in any undergraduate school at Penn (<http://www.upenn.edu/curf/research/grants/yardley-prize>).

Beginning this year [2015], the Urban Studies Program, through funding from “The Gordon Bodek Program in Urban Studies for Enhancing Dialogue, Inquiry, and Public Sensitivity about Interracial and Interfaith Relations” will recognize a student in any of the undergraduate schools at Penn for the best paper addressing issues of interracial and interfaith relations (<http://www.upenn.edu/curf/research/grants/bodek-prize>).

All of these achievements will be recognized through citations in the University Awards ceremony program and either a \$500 or \$1000 cash award.

Since the faculty selection committee requires that students submit the completed research project as well as a letter from their faculty supervisor, I’m writing to ask you [Professor Schorfheide] in your capacity as Undergraduate Chair to inform faculty and Spring 2015 graduating seniors in Economics about this opportunity.

Applications (including the completed project and a letter of support from the faculty member who supervised the project) are due electronically to CURF no later than Friday, April 3, at 4:00pm.

Please feel free to direct any student or faculty questions about the Rose Award, Yardley or Bodek Prizes to me at anneliza@upenn.edu or 215-746-6488.”

3) The Lawrence R. Klein Prize for Outstanding Research in Economics by an Undergraduate (Awarded by [Penn Institute for Economic Research](#)) is awarded to a senior for outstanding research in Economics, upon recommendation of the faculty. The winner receives a cash award of no less than \$250. Emphasis is placed on a research paper, usually written in the Honors Seminar or in an Independent Study.

4) International Atlantic Economic Society Best Undergraduate Paper Competition (below is 2015 announcement):

“Best Undergraduate Paper Award

To encourage undergraduate interest in economic issues, [the] President and Vice President of the International Atlantic Economic Society cordially invite students to compete in the IAES annual

undergraduate paper competition in Boston, October 2015. The IAES strives to recognize and reward outstanding research conducted by undergraduate students worldwide. Winners of the Best Undergraduate Paper Award receive

1. A \$500 check;
2. A handsome commemorative plaque recognizing their accomplishment; and
3. Complimentary publication of the paper in the *Atlantic Economic Journal*.

Submissions for the 2015 BUPA competition are due 15 June, 2015. The winner will be selected at the [80th International Atlantic Economic Conference](#) in Boston, U.S., 8-11 October 2015.” The 2016 meetings will be in Washington, DC, 13-16 October 2016.