**Course Schedule**

The course is a 10-week course comprised of the entire fall quarter. Erik will teach five lectures (weeks 1, 2, 5, 6, and 7) and will focus on using household level data to address various questions of interest to macro economists. Steve will also teach five lectures (weeks 1a, 3, 4, 8, and 9), using data on businesses and households and from automated text analysis to address questions of interest to macro economists. A few additional things to keep in mind:

- Week 10's lecture will be used as an overflow week.
- There will be TWO lectures during week 1. The first will be during the regularly scheduled class time. The second will be during the extended TA session.
- For planning purposes, reserve December 8 - 11 for paper presentations.

* Lecture Meeting Times*

Monday 8:30 a.m. - 11:30 a.m. in Harper Center 3B.

* TA Session Meeting Times*

Wednesday 5:00 p.m. - 7:00 p.m. in Harper Center 3B.

* Note - During week 1, Steve will hold his first lecture during the TA session. On that night, the session will go from 5:00 - 8:00. On certain extended sessions, we may also go past 7:00.

**Steve Davis Information**

Office: 222 Harper Center  
Email: steve.davis@ChicagoBooth.edu  
Office Hours: By Appointment with Niena Kidd, Niena.Kidd@chicagobooth.edu

**Erik Hurst Information**

Office: 410 Harper Center  
Email: erik.hurst@ChicagoBooth.edu  
Office Hours: By Appointment
Nick Tsivanidis (T.A.) Information

Email: ntsivanidis@uchicago.edu
Office Hours: By Appointment

Overview of Course

The goals for this course are the following:

(i) Introduce students to a variety of data sources that can be used to test, calibrate and develop models of interest for macroeconomics and related fields.

(ii) Introduce students to important papers and research questions with high empirical content and relevant to macroeconomics, broadly defined. Given the research interests of Steve and Erik many of the applications will be in the broad area of macro-labor.

(iii) Get students to think hard about the genesis of research questions and the inputs into successful research.

Course Requirements

There is a lot of work in this course. Hopefully, all of it will be beneficial with respect to sharpening your research skills. Aside from attending class, doing the course readings, and participating in lectures and discussions, you will have two additional requirements: handing in homework assignments (data work, referee reports, quantitative exercises, research development) and writing an original “virtual” paper. Below, we discuss these requirements.

Note: Auditors are expected to complete some components of the weekly assignments (those relevant to class discussion).

(1a) “Data” homework assignments

All assignments should be done individually.

Students will be required to use various micro data sets to compute statistics of interest and explore empirical questions. These assignments are designed to familiarize students with important micro data sets, to gain familiarity with statistical tools and software packages for analyzing micro data sets, and to help stimulate thinking about potential dissertation topics. Some homework assignments may also ask students how they would use existing micro data sets to answer questions of interest.

More information on these homework assignments will be posted on Erik's and Steve's websites as the course progresses.
(1b). "Referee Report" homework assignment

Students will be required to hand in “referee reports” on assigned papers. Students will be required to critically assess selected papers and then be prepared to discuss both the achievements and potential limitations of the papers in class. The goal of these assignments is to get students to start critically assessing existing empirical research. Students should be prepared to discuss their report in the TA sessions.

More details can be found on Erik and Steve's websites.

(1c). "Research Idea" homework assignments

Students will be required to pitch a research idea based on a topic/dataset/area of interest. A short write up of the idea will be handed in. During the TA sessions, students will present their ideas to the class.

More details can be found on Erik and Steve's websites.

Note: All questions on the homework should be directed to the TA (not Steve and Erik). Steve and Erik will handle questions on the paper requirements below.

(2) Writing an original “virtual empirical paper”. This will be your main project for the course. It is a virtual paper in that you do not have to completely finish the paper – but you should make significant progress on it. Students will be required to formulate an original research idea, develop a practical plan for executing the idea, and take initial steps in the execution. Your paper should take the following form:

Introduction: What is the question and why is the question of interest?

Literature Review: How does your paper fit into the broader literature?

Theoretical Motivation: This could be actual theory or just a sketch of the relevant theory that underlies your question.

Data: What data would you use to answer/address this question? Why are the data well suited to the question? What challenges and limitations do the data present for the question you seek to address?

Empirical Methodology: How would you use the data to answer your question? Remember to keep in mind the concepts of identification and causality along with the idea that the same set of empirical facts can often support many theories. Depending on the nature of
your question and the ease of accessing and using the data, we may ask you to make significant progress in the actual implementation of your proposed empirical work.

**Falsification Tests:**

What other specifications, tests and investigations could either bolster or cast doubt upon the primary tests of your hypotheses.

**Preliminary Results:**

The extent of the results provided will differ across students based on the project. Steve and Erik will provide feedback throughout the quarter to guide students as to our expectations for their specific virtual paper.

### Dates associated with the virtual paper.

- Provide a two-page write up to Erik and Steve about your proposed research idea by 10/20.

- Meet with Erik and Steve together to get feedback on your preliminary idea during the week of 10/20 or 10/27. We may require a second meeting if we ask for sufficient changes.

- Provide a preliminary presentation of your idea during the week of December 8th (on the 8th, 9th, or 10th). A version of the slides used for your presentation must be provided to Erik and Steve by December 3rd. Steve and Erik will provide feedback on the slides. Each student will be given a 20 minute slot - including comments from other students, Erik and Steve. The most common mistake students make at this stage is trying to do too much during their time. With a 20 minute slot, you should only plan on speaking for 10 minutes. Given historical experience, this translates into about 10 slides. Your goal will be to communicate your idea to Steve, Erik and the rest of the class using only 10 slides and your oral remarks.

- At the time of the first set of a presentations (12/8), a 10 - 15 page preliminary draft of your virtual paper will be due to Erik and Steve.

- **NOTE:** Please plan to be in town through the presentations and discussions (do not leave town prior to 12/11).

- Steve and Erik will provide feedback to students on their preliminary draft during the winter break. During this time, we will tell you what needs to be done for your final virtual paper submission in late February and your presentation to the class in early March.

- Some of you may be required to submit an intermediate version of the paper in early January if sufficient progress was not made on your first preliminary draft. This will come out of the discussions with Erik and Steve.

- A complete version of the virtual paper is due to Steve and Erik on 2/27.
• A final presentation of the paper is due to the class (again 20 minutes total - inclusive of comments) during the week of March 2nd. Steve and Erik will schedule these presentations during mid February. Again, a version of students’ slides will be due to Steve and Erik three days before the first class presentation. Steve and Erik will provide feedback on the presentation slides before the presentations.

Course Grading

• 65% of the course grade will be on the virtual paper (both paper and presentation)
• 35% of the course grade will be on the homework assignments.

We will provide letter grades when grading the virtual paper. These grades will be based on effort, originality/insight, execution, and clarity.

We will provide √⁺, √, √⁻, 0 for the homework assignments (each component separately). These grades will be based on the quality and imagination of your analysis and work and the clarity of your write-ups.

Reading Lists/Topics

Erik and Steve will provide separate reading lists for their portions of the course. See their respective web pages for more information.

TA Lectures

Steve and Erik will post a list of the TA lecture dates and topics on their web pages. Erik and Steve will attend these sessions when they are in town.

Prelim Requirements

Starting this year, the applied macro prelim will consist solely of a paper. The paper must address a question of interest to applied macroeconomists (broadly defined) and must contain a significant empirical component (data work/calibration/model estimation/ hypothesis testing/SVAR/etc.). Specific rules for the prelim will go out in the late winter/early spring. However, here are some guidelines that you should keep in mind.

• Each student must find a primary reader and a secondary reader for their prelim paper. The primary reader must be one of the professors who teach in the applied macro sequence (Hurst, Davis, Vavra, de Melo).

• Each student must submit to their primary reader and secondary reader a substantive proposal for your prelim paper. This proposal should come no later than around May 1st (the exact date will be determined later). The proposal should be an extended outline (introduction, data work, theory, etc.). The proposal should identify what work you have already done (in an existing paper), what you plan to
revised (from an existing paper), and what will be new. If you reference an existing paper you have authored, that should be appended to the proposal.

Your prelim paper could be a new paper or could be a significant extension of a paper previously used in a course. If you plan to extend a paper used in a course, the prelim proposal should outline how that paper would be significantly extended. For example, you may choose to build upon the virtual paper used in our class. However, in order to pass the prelim, you need to make sure that the prelim paper is a substantial advancement upon what you hand to us in late February.

By early May, you must submit to Professor's Hurst and Davis your proposal and which faculty agreed to be your first and second readers. If no faculty agreed to be your first and second readers by that time, you will not be allowed to take the applied macro prelim. Note: It sometimes takes faculty awhile to reply to student requests to be readers. You need to incorporate that into your plans when you are circulating your proposal. It will be your responsibility to give faculty enough time to review your proposal.

All students who take the applied macro prelim must receive at least a grade of B in the three distinct courses that are part of the applied macro sequence. This year that is Davis/Hurst, Vavra, and de Melo.
TA Sessions/Homework Dates

October 1: Steve's First Lecture

October 8: Steve's Homework 1 Discussion. Homework is due to TA at 12:00 p.m. on October 7th.

October 15: Nick will review many major household datasets. He will also discuss how to present and display empirical results in papers/homework. Finally, he will give his thoughts on the genesis of research ideas.

October 22: Erik's Homework 1 Discussion (Extended Session). Homework is due to Erik/Nick at 12:00 p.m. on October 21.

October 29: Open (for now).

November 5: Steve Homework 2 Discussion (Extended Session). Homework is due to Steve/Nick at 12:00 p.m. on November 4th.

November 12: Open (for now).

November 19: Erik's Homework 2 Discussion. Homework is due to Erik/Nick at 12:00 p.m. on November 18th.

November 26: No session

December 3: Steve/Erik Joint Homework Discussion. Homework is due to Steve/Erik/Nick at 12:00 p.m. on December 2nd.