## Economics 742

**Applied Macroeconomics** Spring 2022

#### **Adam Guren**

auren@bu.edu http://people.bu.edu/guren 400 or 413 (Please email ahead)

#### **Class Time & Location**

Tue & Thu 9:30-11:00AM 270 Bay State Rd. Room 315

#### Robert King

rgkbucourses@gmail.com http://www.bu.edu/econ/rking OH: Tu 3:30-5, Th 2-3:30 in Room Office hours held in Room 502 or on Zoom via google calendar at bu.edu/econ/rking/.

## **Course Overview**

This course is the final component of the second-year macroeconomics field sequence for the Boston University economics PhD program. We will review recent research in the field of macroeconomics and provide feedback and guidance for student research projects. The course is split into two parts taught separately by Professors Guren and King. A reading list for each part will be posted on Blackboard at learn.bu.edu. Evaluation will be based the assignments described below and on a research project.

# Topics Covered by Adam: Until 3/14

- Micro Data and Identification in Macroeconomics
- Housing and Macroeconomics
- Heterogenous Agent New Keynesian Models

# Topics Covered by Bob: Starting 3/21

- Monetary Regimes in History and Econometrics
- Optimal Monetary Policy Design with Regime Switches and Evolving Reputation

# **Course Requirements**

Students will be evaluated based on their performance on assigned readings and a research project. Grading specifics will be discussed in class.

## Required Readings and Course Participation (40% of grade)

For Adam's part (20% of total grade)

In order to produce new macroeconomic knowledge, you must first be able to consume the existing ideas of macroeconomists. For most class meetings, one or two journal articles will be specified on the course reading list as required reading.

- Summary Slides: For a few specified classes in the first seven classes, each student will prepare a 2-slide summary of each article assigned as required reading. The first slide should briefly summarize the conclusions of the article. The second slide should present an analysis of the paper: a critique or an idea related to the paper. To receive credit for each assigned reading, students must email their summary slides to the instructor no later than 3pm the day before the class meeting.
- In Class Presentation of HANK Paper: An important skill to develop is to be able to present a paper in a seminar. This assignment is meant to provide students an opportunity to present a paper that is not their own to the class.

For the last four lectures of Adam's part from **February 14 to March 14**, the class will be structured as a reading group on Heterogenous Agent New Keynesian Models. We will cover two to three papers a day (starting early when we have three papers), and everyone will be expected to read the papers. At the beginning of the semester, each student will choose a paper to present for this portion of the class. Every student will be expected to teach the paper to the class (which will have read the paper). You should plan for a presentation of 25 mins uninterrupted with no more than 25 slides. We will discuss the paper as a group for about 10 minutes (which may be interspersed with the presentation).

There is also a list of related papers for each paper. Please look briefly at these related papers and mention them in your presentation if you think it would be useful. You do not need to read them with the same level of detail and care as the main paper (see Adam's notes for examples of how to briefly summarize related papers). Please send Adam your slides at least 48 hours before your presentation. Adam will work with you on refining them as necessary. He will also post them on the website so that other students will have them for note taking.

### For Bob's Part (20% of total grade)

- Summary slides on selected course readings: For specified classes in the second half of the course, each student will prepare a 4-slide summary of a specific article assigned as required reading. The first slide should briefly summarize the substantive conclusions of the article. The second slide should clearly state the author(s)'s description of the contribution of the article and the student's appraisal of this contribution. The third slide should provide a critique of the paper. The fourth slide should express a new research idea related to the paper. To receive credit, students must email their slides to the instructor no later than 3 pm the day before the class meeting.
- Pseudo conference module: Conference-related activities are very important for
  effective marketing of research. This course module is designed to start training
  you, but is based on the idea that it is easier to do so with someone else's research.
  Looking forward, you will be doing presentations of your own research in the BU
  macro lunch next Fall. Looking further forward, the BC-BU Green Line Macro meeting provides an opportunity for you do present your research and to gain feedback
  on it from excellent discussants (faculty at Boston College and other Boston area
  research institutions).
  - Teams and Papers: Each student will be assigned a paper on Friday January 27th, as well as a list of teammates for this activity. (Teams and papers will be assigned by the instructor but with some consideration given to student areas of research interest; it is anticipated that each teams will contain three members, but some may be smaller based on course enrollment.)
  - Poster: On Wednesday, March 22nd, each team will submit a poster describing the contributions of the paper, two pages of bullet points to accompany a poster presentation, and a 3 minute recorded presentation. On Thursday, March 23rd, one team member will present the poster within the 3 minute window, with 2 minutes for follow up questions. It is not necessary to produce a physical poster, but the presentation on the classroom computer should be in the poster format.
  - Conference presentations and discussions: Conference presentations and discussions are among the most important activities for academic researchers. For each assigned, the teammates will work to produce a set of slides for a 12 minute presentation, a set of slides for a 8 minute discussion, and a prepared response to points raised by the discussant and questions from the floor. The last component should include 1 or 2 slides for anticipated discussant remarks

and answers for a list of anticipated discussant remarks or floor questions. Conference sessions will be held on **Tuesday April 4th and Thursday April 6th**.

• External presenters. A feature of recent versions of Part 2 of EC742 has been presentations by external visitors, talking on topics related to the class and visiting via Zoom. Such sessions may be held during normal class times but also during Friday afternoons from 4 to 5:30. If you can, please do not schedule other Friday afternoon activities during Part 2 of the course. But, as such sessions are recorded, it will be possible to gain from these sessions in the event of that a student has a conflict.

Grading for Part 2 of EC742 will be based on these activities (summary slides and pseudo conference) but also on class participation. Details will be discussed in class.

## **Research Project (60% of grade)**

Students will be expected to complete an independent research project over the course of the semester. It is our hope that this project can serve as the foundation for a student's second-year paper or future dissertation research. Note that you are welcome to work in pairs for our class, but second year papers cannot be coauthored.

• Friday February 10th 11:15-12:15 and 2-5: Each student meets individually with Bob and Adam together for 15 minutes to discuss your research interests and potential topics. 24 hours prior to their meeting, students e-mail Bob and Adam at least three ideas for potential presentation topics.

After the first meeting, Bob and Adam will assign students a project adviser based on their interests. You are welcome to meet with the person who is not your adviser or and macro faculty members not teaching 742. However, during weeks with required one-on-one meetings with your project adviser, we ask that you not meet with the other faculty member so that project advisers can allocate enough attention to their advisees.

### **Step 1: Research Proposal**

Formulating specific goals and planning for their implementation forces a researcher to think about what might be learned from their work. Students will present a research proposal with a set of concrete objectives and steps for completion of their research project.

• **Prior to Spring Break**: Each student meets individually with their project adviser to review their progress. In advance of this meeting, students prepare a two-page document outlining the topic, data (if empirical), methods, and relation to the literature.

• Thursday, March 16 8:45-10:45 and Friday March 17 11:15-1:15: Each student gives a 8-minute presentation of their proposed research. You have *no more than six slides* to motivate the topic, explain the idea clearly, provide some preliminary evidence or analysis, and explain what the next steps are for the research. Because students will be expected to provide results by the end of the semester in part 3, students should clearly explain what they plan to achieve in that time frame. Students are expected to attend all of the presentations to the best of their ability.

### **Step 2: Research Results**

In order to contribute to macroeconomic knowledge, a researcher must produce results. This process is the core of research and often requires the acquisition of new skills and creative problem-solving effort. In order to ensure that students gain experience with the implementation of a research plan, each student will present some preliminary results building on their proposal from part 2. Note that after your part 1 presentation, you will not be able to change topics.

- March 20-31: Each student meets individually with their project adviser to get feedback on your research proposal presentation and discuss plans for what results are reasonable to achieve by the final presentation.
- In Mid April: Each student meets individually with their project adviser to review their progress and decide on specific goals for the final presentation.
- May 2 and May 4 8:45-10:45: Each student gives a 12-minute in-class presentation of their preliminary research results. The presentation should be no more than eight slides. Students should include an introduction motivating their work project, their results, and a plan of where to continue next. The presentation should not assume that we have seen their step two presentation; in fact it should explain and motivate everything as if we have never heard of their research before. Students must also submit a research paper outline of at least three pages based on their results.