Instructor: Adrien Auclert, aauclert@stanford.edu

Lectures: Tuesdays and Thursdays, 2:30pm-4:20pm, over Zoom. Classes run 30 March to 30 April.

Adrien’s Office Hours: Wednesdays 4:30pm-5:30pm, over Zoom.

Teaching Assistant: Frédéric Martenet, martenet@stanford.edu

TA sections: Fridays, 9.30am-11.20am, over Zoom.

Fred’s Office Hours: Mondays 10.20am-12.20pm over Zoom.

Class Zoom link: See Canvas

Course objective: This course covers the two ‘canonical’ business-cycle macro models—the standard real business cycle (RBC) model and the standard new keynesian (NK) model. These models are used by macroeconomists to think about business cycle fluctuations, inflation dynamics, and the effects of monetary and fiscal policy. They are the building block for a large part of modern macro research, and for the models used by policy institutions. We discuss macroeconomic facts, successes and failures of the theories, and extensions of the standard models.

Class material: My lecture slides and supplementary readings provided in the syllabus are the primary material for this class. Classes will be recorded on Zoom but please attend. The following textbooks are helpful for background reading:


BF is a little dated but remains a classic. Romer is a very good introduction, pitched to an advanced undergraduate level. Gali is short, concise, and a highly recommended read for the second part of this class. LS is a useful reference on a variety of topics.
**Grading:** Your grade will be based on:

a) Four problem sets designed to develop a mixture of theoretical, empirical, and quantitative skills. You are allowed to work in groups of up to three and submit a problem set for the group. Problem sets are due on Fridays, each Friday starting in week 2, on Canvas (worth 40% of your grade).

b) A final exam. The exam will be a timed midterm, to be taken on Friday 30 April on Gradescope. You will have 3 hours over a 24 hour window to do the exam (worth 60% of your grade).

**Prerequisites:** First-year PhD core classes in micro, macro and econometrics up to this point. I assume basic knowledge and familiarity with a) dynamic programming, b) the neoclassical growth model, c) general equilibrium analysis, and d) time series analysis.

**Students with Documented Disabilities:** Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Office of Accessible Education (OAE). Students should contact the OAE as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: 723-1066, URL).

**Class plan.** The plan for each class is outlined below. There may be small deviations from the plan, especially towards the end if we are falling behind schedule.

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<th>Lecture #</th>
<th>Date</th>
<th>Topic</th>
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<td>1</td>
<td>Tuesday 30-Mar</td>
<td>Business cycle facts and comovements</td>
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<tr>
<td>2</td>
<td>Thursday 1-Apr</td>
<td>RBC model, part I: planner’s solution</td>
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<td>S1</td>
<td>Friday 2-Apr</td>
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<td>3</td>
<td>Tuesday 6-Apr</td>
<td>RBC part II: decentralization &amp; asset pricing</td>
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<td>4</td>
<td>Thursday 8-Apr</td>
<td>RBC part III: topics &amp; critiques</td>
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<td>S2</td>
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<td>5</td>
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<td>Money and Prices</td>
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<td>6</td>
<td>Thursday 15-Apr</td>
<td>Monopolistic Competition and Sticky Prices</td>
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<td>S3</td>
<td>Friday 16-Apr</td>
<td>Problem set 2 due</td>
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<td>7</td>
<td>Tuesday 20-Apr</td>
<td>NK model, part I: derivation</td>
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<td>Thursday 22-Apr</td>
<td>NK model, part II: positive analysis</td>
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<td>9</td>
<td>Tuesday 27-Apr</td>
<td>NK model, part III: optimal policy</td>
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<td>10</td>
<td>Thursday 29-Apr</td>
<td>Review session</td>
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<td>S5</td>
<td>Friday 30-Apr</td>
<td>Online Exam + Problem set 4 due</td>
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Background reading: macroeconomic debates


1 Business cycles facts and methods

BF, Chapter 1


2 Real Business Cycles

BF, Chapter 2


Methods


Asset pricing

LS, Chapters 8 and 14


Fiscal policy: the neoclassical view


RBC critiques and responses: labor supply, wedges


### 3 Money, Prices and Output


### 4 Money, monopolistic competition, markups

*Gali, chapter 2 & appendix to 3

5 The New Keynesian model

*Gali, chapter 3


Fiscal policy: the New Keynesian view


Optimal policy

*Gali, chapters 4&5

