Economic growth
(This version: February 11, 2014)
Yao Tang, Spring 2014
Department of Economics
Bowdoin College

Lecture time: Monday 11:30 - 12:55, Wednesday 11:30 - 12:55
Place: Searles 115

Contact Information
office: Hubbard 106
office hours: Monday 9:30-11:00 am, Wednesday 9:30-11:00 am or by appointment.
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Please note, I may not check emails frequently during evenings and weekends.

Course Description and Objectives
Vast differences in nations long-run growth experience significantly affect the degree of inequality and overall welfare of the global population. This course offers both theoretical and empirical analysis of macro determinants of economic growth. We will explore the role of such key factors as the accumulation of physical capital and human capital, productivity and technology, natural resources, openness to trade and capital flow, institutions, culture, and geography.

This course also provides opportunity for students to further develop skills in original research, writing, and presentation.

Key dates

- Wednesday Jan 22: instructor out of town, no class
- Wednesday Feb 24: midterm
- Friday April 25: take-home final (not cumulative)
- Saturday May 17: research paper due
Evaluation
Your course grade is based on

• (10%) 4 homework assignments.
• (5%) 1- to 2-paragraph summaries for reading materials assigned for each lecture
• (10%) class participation
• (15%) one midterm exam
• (15%) one take-home final exam (not cumulative)
• (10%) in-class presentation of your research
• (35%) one research paper
• (3%) wildcard article presentation (optional)

Summaries of reading materials. Three days before each lecture, the instructor will assign the reading materials. Students should hand in a 1- to 2-paragraph summary of the reading materials. These summaries will be useful for both in-class discussion and the exam preparation.

Class participation. Besides participation in general discussion, each student (paired with another student) will be assigned to read an academic paper intensively and is expected to contribute significantly to the discussion of the paper.

Research paper and presentation. The 3rd and 4th assignments of the course are designed to help students with their research papers. In the 3rd assignment, each student will write a two-page short literature review of three academic papers which can be student-specific, and propose a research question based on the understanding of the literature. In assignment 4, with the help of the instructor, students will look for and use data to answer the research question identified in assignment 3. The work done in assignments 3 and 4 could serve as the foundation for your presentation and research paper. Each student should go over their presentation slides with the instructor at least one day before her/his scheduled presentation.

While all of you have written numerous term papers by this time, I recommend that you have a look at “Writing tips for Ph.D. students”, a 13-page short paper by John Cochrane, for
some tips on writing economics papers. His tips on writing and presentation are originally intended for Ph.D. students, but most of them are useful to undergraduate students as well. For those who are interested, Deirdre McCloskey’s “Economical Writing” is a longer but still enjoyable read. The article “How to give a killer presentation” by Chris Anderson in the Harvard Business Review provides additional guidance for presentation.

**Wildcard articles.** To encourage students to connect learning in this course to real-world issues, each student has the option of bringing into class a wildcard article from newspapers, magazines or similar media outlets. Some examples of media outlets are The Economist, the New York Times, the Wall Street Journal, and Fortune Magazine. The articles must be recent, i.e. published within three months, and related to the content of the course. We will have at most one wildcard article per lecture and each student can choose to bring in at most one article. A student who brings in an article should email the instructor the day before the lecture. The class will spend the first 15 minutes of the lecture reading and discussing the article. The student who brings in the article should prepare two questions to facilitate discussion. Students will be graded based on the relevance of the articles and quality of questions.

**Academic Honesty**
Students should be familiar with the Bowdoin College Academic Honor Code, available at http://www.bowdoin.edu/studentaffairs/student-handbook/college-policies/index.shtml In particular, for the assignments, students are encouraged to work together but they must each hand in their own copy of answers.

**Reading materials**

**Tentative Schedule of Topics**
Please note I reserve the right to change the order of topics, or to drop topics from the list. However, I will not add new topics.

1. January 20, Course introduction
2. January 22, **Instructor out of town, no class**
3. The Solow model
   - January 27, Solow model, Chapters 2 and 3
• January 29, Solow model, Chapters 4 and 6

• February 3, Taking the Solow model to data: growth rates

• February 5, Taking the Solow model to data: output levels

• February 10, Taking the Solow model to data: output levels

• February 12, Taking the Solow model to data: output levels

4. Endogenous growth models

• February 17, The AK model and a model with endogenous TFP

• February 19, Models with endogenous TFP

5. February 24, in-class midterm

6. Openness and growth

• February 26, Trade and growth, Chapter 11
• March 3, Trade and growth

• March 5, Capital flow and growth, Chapter 11

7. The fundamentals

• March 24, Institution, Chapter 12

• March 26, Institution

• March 31, Institution vs trade

• April 2, Institution vs human capital

• April 7, Institution vs geography, Chapter 15
• April 9, Natural resources, Chapter 16

• April 14, Culture, Chapter 14

• April 16, Geography and Culture

• April 21, Culture

• April 23, Summary and discussion, Chapter 17

8. Student presentations

• April 28, up to 3 student presentations
• April 30, up to 3 student presentations
• May 5, up to 3 student presentations
• May 7, up to 3 student presentations
• May 9, up to 6 student presentations