Overview

This course explores the tendencies and causes of economic growth in capitalism, with a focus on the role of technology. Students will investigate a variety of ways of understanding technology's relation to economic growth, notable among these being four major paradigms and traditions in economic theory: Neoclassical, Schumpeterian, Endogenous Growth, and Marxian. Examining these theories and various sources of technological change—such as R&D, learning-by-doing, and shifts in human capital—will inform discussions of the political economy of technology within current economic systems, taking a comparative perspective. The profound social, political and cultural consequences of these dynamics will also be examined.

Evaluation

There are two take-home midterm exams (non-cumulative) and a final term paper. Students are expected to present the proposal of their final term paper in the last week of classes. Term paper will be due on the last day of the semester. Exam questions will consist of solving simple math models and short essays. The math portion will consist of quantitative or graphic work. Both the math and short essay questions are drawn from class lectures, the textbook, and the supplemental course materials (e.g. readings, audio & video clips).

In general, you will not be asked to answer a question unless it is covered either in class lectures or by supplemental class activities.

Required Textbook

There is one required textbook for this course: Introduction to Economic Growth (3rd edition) by Charles Jones and Dietrich Vollrath (henceforth JV). Students can obtain the textbook from Bennington College Bookstore. We will also read and discuss selected chapters from Hounshell’s From the American System to Mass Production, 1800-1932: The Development of Manufacturing Technology in the United States, and Mazzucato’s The Entrepreneurial State: Debunking Public vs. Private Sector Myths. Copies of the latter titles will be available through the Library. Other required course materials will be posted to the Moodle for the course.
**COURSE GRADE:** Your *term grade* for the course will be determined by a weighted-average of the following:

- Class Participation 15%
- Discussions 15%
- Two Take-Homes 30%
- Final Paper 40%

Your final letter grade will be determined by your average score. Here is the cut-offs table:

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<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
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<tbody>
<tr>
<td>A</td>
<td>96.0 – 100</td>
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<tr>
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<td>92.0 – 95.9</td>
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<td>B+</td>
<td>88.0 – 91.9</td>
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<td>D</td>
<td>60.0 – 64.9</td>
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<tr>
<td>F</td>
<td>below 60</td>
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**Course Outline**

**Week 1: 09/01 and 09/04**

(JV) Ch1: The Facts of Economic Growth

An introduction to capitalism: circuit of capital model (will be presented by the instructor)

**Week 2: 09/08 and 09/11**

(JV) Ch2: The Solow Model


**Week 3: 09/15 and 09/18**

(JV) Ch3 Empirical Applications of Neoclassical Growth Models


**Week 4: 09/22 and 09/25**

(JV) Ch4 The Economics of Ideas


**Week 5: 09/29 and 10/02**

(JV) Ch4 The Economics of Ideas (continued)


(JV) Ch5 The Engine of Growth


**Week 6: 10/06-10/09**

The Engine of Growth (Continued)


**Week 7: 10/13 and 10/16 (no class)**

(JV) Ch 9 Alternative Theories of Endogenous Growth

First Take-Home Exam will be handed-out on 10/13

Week 8: 10/20 and 10/23
First Take-Home Exam due in class on 10/20

Marx on Technology

Week 9: 10/27 and 10/30

Marx on Technology (continued)

Contradictory Dynamics of Capitalism
(Required) O'Hara, P.A. (2006). Karl Marx on the Contradictory Dynamics of Capitalism: Innovation. Globalisation and Competition in the Grundrisse. (Full text will be provided by the instructor.)

Week 10: 11/03 and 11/06

Labor Process


**Week 11: 11/10 (no class) and 11/13**

Second Take-home will be emailed to students on 11/10

Fordism and Taylorism


**Week 12: 11/17 and 11/20**

Second Take-home due in class on 11/17


We will read and discuss “Chapter 6: The Ford Motor Company and the Rise of Mass Production in America”, and “Chapter 7: Cul–de–sac: The Limits of Fordism and the Coming of “Flexible Mass Production” ”.

**Week 13: 11/22 and 11/25 (No classes)**


Class discussion of *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (Thanksgiving Break)
Week 13: 12/01 and 12/04

Understanding Economic Growth: Theory of Institutions

Week 14: 12/08 and 12/11

Technology: Public vs. Private Institutions

TED Talk: Mariana Mazzucato: “Government — investor, risk-taker, innovator”


We will read and discuss “Introduction: DoSomething Different”, “Chapter 2: Technology, Innovation and Growth”, and “Chapter4: The US Entrepreneurial State”

Review of the course and class presentation