

Economics 363

Economic Growth

COURSE DESCRIPTION

This is a course in modern growth theory. We will examine the quantitative and qualitative evidence used by economists and historians and develop a series of mathematical models. Throughout this course I will emphasize the interactions among data, theory, and history in explaining economic growth.

I have been very selective in my choice of topics. This is *not* a reflection on the importance of those topics; rather, it reflects the need to cover a great deal of material in a single semester.

MEETING TIME AND PLACE

11:50-12:45 on Mondays, Wednesdays, and Fridays
Main 324, CSB

CONTACT INFORMATION

Phone: 363-5683

E-mail: ljohnston@csbsju.edu

OFFICE HOURS

Monday and Wednesday: 2:15-3:15 in Main 333

To make an appointment at another time, please contact Stacy Penk (spenk@csbsju.edu)

ECONOMICS DEPARTMENT GOALS AND OBJECTIVES

The CSB|SJU Economics Department has developed the following goals and objectives for student learning in the department:

Goal 1: Students of economics will be able to apply economic theory to understand economic issues and policies by:

- 1.1: Analyzing interactions between human values and economic life;
- 1.2: Demonstrating a knowledge of and ability to apply appropriate analytical tools; and
- 1.3: Recognizing the diversity of methodologies practiced in conducting economic analysis.

Goal 2: Students of economics will be able to evaluate evidence bearing on those economic issues and policies by:

- 2.1: Identifying, locating, and assessing the necessary quantitative and non-quantitative information, facts and arguments; and
- 2.2: Employing both quantitative reasoning and computing skills where appropriate.

Goal 3: Students of economics will be able to communicate effectively the results of their economic analysis through:

- 3.1: Clear writing, appropriately supported and documented;
- 3.2: Effective participation in discussion; and
- 3.3: For majors, polished oral presentations.

COURSE LEARNING GOALS

By the end of this course, students will be able to:

- explain the sources of long run economic growth at an advanced level;
- work with growth theory in written and spoken English, graphical analysis, and mathematical models;
- understand the evolution of economic thinking on growth from Adam Smith's writings to the present;
- read critically articles from professional journals;
- understand and critique articles about economic growth in national newspapers and magazines;
- meet the Economics Department learning goals as they apply to this course.

PREREQUISITES

Economics 332, 333 and 334 are required for this course. Familiarity and facility with basic algebra and the use of graphs are essential. Elementary calculus and basic statistical concepts will also be used throughout the course.

BOOKS

Please purchase both of these books. They are available at the CSB bookstore.

Charles I. Jones and Dietrich Vollrath, *Introduction to Economic Growth*. Third Edition. New York: W. W. Norton, 2013.

David Warsh. *Knowledge and the Wealth of Nations: A Story of Economic Discovery*. New York: W. W. Norton, 2006.

ADDITIONAL READINGS AND CLASS NOTES

All additional readings and class notes will be posted at www.louisjohnston.com. Click on Classes, then Economics 363.

GRADES IN THIS COURSE

The [Academic Catalog](#) states, "Intellectual achievement is more important than grades. Grades, however, are necessary for advisory purposes, for determination of the quality of academic

achievements and for transfer of credit to other institutions. Grades are designated by letters. In order to compute averages, numerical values called honor points have been assigned to the grades as follows:"

Letter grade	Interpretation	Honor points for each credit
A	Excellent	4
AB		3.5
B	Good	3
BC		2.5
C	Satisfactory	2
CD		1.5
D	Minimum Passing	1
F		0

I will apply this scale AND the interpretation of each grade to all of your work.

HOMEWORK ASSIGNMENTS

Economics is a subject that you must practice in order to learn, so homework problems are an essential part of this course. I will encourage this process by basing 15% of your course grade on homework. I usually assign homework for every class meeting unless we are having a quiz or exam.

You will be assigned problems from the textbook and/or questions that I have written. You are to solve each problem, writing out your solution (including your reasoning) along with any remarks or questions about the problems that you would like me to answer. This last point obviously does not preclude you from asking questions; in fact, I hope it will encourage you to do just that. If something is unclear, ASK!

Each assignment has a maximum score of 2 points. I will look to see if you have done all of the assigned problems, regardless of whether you did them correctly or not. If you do this, you will receive 2 points for the assignment. If you do not do all of the assigned problems, you will receive either 1 or 0 points depending on how many problems you answered.

Additional notes about homework:

- **ALL HOMEWORK MUST BE TYPED.** I suggest you use this opportunity to learn the features in Microsoft Word that allow you to type up equations (Insert > Equation in Word) and draw graphs (Insert > Shapes in Word). In addition, some assignments are easier to complete if you use a spreadsheet (e.g. Microsoft Excel.)
- **I WILL NOT ACCEPT LATE ASSIGNMENTS** unless you have discussed it with me in advance.

- You should print a copy of your homework and bring it to class since we will often base class work on that day's assignment.

LITERATURE REVIEW PROJECT

Economic growth is a huge field, so we will focus on certain topics and themes while only briefly discussing or ignoring others. The literature review project will give you the opportunity to dig deeply into a topic of your choosing and provide a foundation for a senior research project.

The project will count for 20% of your course grade, and will proceed in three steps:

1. Due October 7: Choose a topic, narrow it down, and compile a list of 20 relevant academic papers and/or books. (5% of course grade)
2. Due November 14: Submit a draft literature review using 10 academic papers and books. (5% of course grade)
3. Due December 12: Submit a final, complete literature review focused on 5 to 7 academic papers and books. (10% of course grade)

I will provide detailed instructions for each step on the course website.

EXAMS

There will be two midterm exams and a final exam.

The midterms will be given on September 30 and November 7. These will be in-class, open book and note exams consisting of true/false/uncertain questions and problems. The first exam will cover material from August 29 through September 28 and the second exam will cover material from October 5 through November 4. The midterm exams together will count for 45% of your course grade.

The final exam will be given on Thursday, December 15 at 3:45 p.m. It will count for 20% of your total grade. It will be a comprehensive, open book and open note exam.

GRADING OPTIONS

Some students may choose to take this course on a satisfactory/unsatisfactory (S/U) basis rather than for a letter grade. [The college policy regarding who may or may not take the course S/U is in the current Academic Catalog.](#) You *must* inform me that you intend to take the course S/U by 5 p.m. on Monday, December 12.

ACADEMIC MISCONDUCT

I will apply [the institutional policy on academic misconduct](#) in this course.

CLASS CANCELLATION

I may need to cancel class during the semester due to weather, illness, etc. If class is canceled, there will be a note in your e-mail telling you that class is canceled. If you arrive at our classroom and find a note written on the board saying that class is canceled, CHECK YOUR EMAIL to confirm this. DO NOT ASSUME THAT THE NOTE IS CORRECT!

DISABILITY INFORMATION

The colleges have support systems in place for those students who have an official diagnosis for a Learning Disability or a Physical Disability. If a student has had a diagnosis for a specific Learning Disability or a Physical Disability, [Student Accessibility Services](#) (SAS) will provide me with information on current CSB|SJU accommodations. If a student volunteers information regarding a Learning or Physical Disability I will contact SAS.

HUMAN RIGHTS POLICY

[CSB|SJU](#) is “committed to creating and maintaining an environment in which all members of the community are aware of and respect the rights and human dignity of every other member. Discrimination and harassment based on race, religion, color, national origin, sex, sexual orientation, age, marital status, disability, familial status, status with regard to public assistance, or other legally protected category or characteristic are reprehensible and are antithetical to the mission of these institutions. CSB and SJU have zero tolerance for unlawful discrimination and harassment.”

CLASS CALENDAR

Date	Topic	Reading
August 29	Introduction to the course	Syllabus
August 31	Modern Economic Growth	Kuznets, “Modern Economic Growth: Findings and Reflections.” Easterlin, “The Worldwide Standard of Living since 1800.”
September 2	Growth Facts, Part 1	Jones and Vollrath, Chapter 1
September 5	The Solow model: basic structure	Jones and Vollrath, pp. 20-30
September 7	The Solow model: comparative statics	Jones and Vollrath, pp. 30-34
September 9	The Solow model: transition dynamics	Jones and Vollrath, pp. 34-36
September 12 September 14	The Solow model: adding exogenous technical change	Jones and Vollrath, pp. 36-44

September 16	Growth accounting: basics	Jones and Vollrath, pp. 44-50
September 19 September 21	Applying growth accounting	Field, "The Most Technologically Progressive Decade of the Century."
September 23	Economic theory: why do we need it?	Warsh, Preface, Introduction, Chapters 1, 2, and 3 Romer, "Why, Indeed, in America? Theory, History, and the Origins of Modern Economic Growth."
September 26	The Pin Factory and the Underground River	Warsh, Chapters 4 through 7
September 28	Keynes, Solow, and the Moderns	Warsh, Chapters 8 through 11
September 30	Exam #1	
October 5	Why did growth theory hibernate for twenty years?	Warsh, Chapters 12 and 13
October 7	Modeling households: the two-period model	
October 10 October 12 October 14	The Diamond model: overlapping generations	
October 14 October 17 October 19	The Ramsey-Cass-Koopmans model	
October 20	Clemens Lecture, 8 pm, Stephen B. Humphrey Auditorium, SJU David Autor, MIT Department of Economics	
October 21	Special guest: David Autor	Reading: Skills, Education, And The Rise of Earnings Inequality Among the "Other 99 Percent"
October 24 October 26	Non-renewable resources in the Solow model	Jones and Vollrath, pp. 228-237
October 28	Growth Facts, Part 2	Jones and Romer, "The New Kaldor Facts: Ideas, Institutions, Population, and Human Capital."
October 31 November 2 November 4	Human capital and development accounting	Jones and Vollrath, pp. 54-58
November 7	Exam #2	
November 9	The economics of ideas	Jones and Vollrath, Chapter 4 Warsh, Chapter 21

November 11	The economics of ideas	Jones and Vollrath, Chapter 4 Warsh, Chapter 21
November 14	The Romer model: basic structure	Jones and Vollrath, pp. 97-107
November 16	The Romer model: macroeconomic implications	Jones and Vollrath, pp. 107-111
November 18	The Romer model: microeconomic foundations	Jones and Vollrath, pp. 111-119
November 21	The Romer model: implications	Jones and Vollrath, pp. 133-135 Warsh, Chapter 22
November 28	The follower-leader model	Jones and Vollrath, pp. 140-146
November 30 December 2	Technology transfer, globalization, and economic growth	Jones and Vollrath, pp. 146-152
December 5 December 7 December 9	Social infrastructure and growth	Jones and Vollrath, Chapter 7 Engerman and Sokoloff, "Institutions, Factor Endowments, and Paths of Development in the New World."
December 12	What have we learned about growth?	Sachs, "Globalization and Patterns of Economic Development."
December 15	Final Exam: 3:45 – 5:45	