

Spring 2010

Theory of Economic Growth

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Office Hours: 1:00 – 2:00 Monday; and 10-11 Friday, in 4506 WWPH, or by appointment.

Textbook: *Introduction to Economic Growth*, Charles I. Jones, Norton Publishers, 2st Ed.

Additional Readings: *Cat's Cradle*, Kurt Vonnegut, Jr., Dell Publishing.

“The Industrial Revolution: Past and Future”, Robert E. Lucas, Jr.,
http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3333

“The New Kaldor Facts”, Charles I. Jones and Paul M. Romer,
<http://www.nber.org/papers/w15094.pdf>

Both books are available at the Pitt Book Store; copies are also being held on reserve in the Econ/GSPIA library.

Additional Resources: Text Web site: <http://www.stanford.edu/~chadj/growth.html>
Penn World Tables: <http://datacentre.chass.utoronto.ca/pwt/>
The World Bank: <http://www.worldbank.org/>
The CIA World Fact Book: <http://www.worldbank.org/>
Cross-Country Comparisons: <http://gapminder.org/>
Current Events: *The Economist* (GSPIA Library/\$20 student subscriptions)
Writing: <http://www.economics.harvard.edu/files/WritingEconomics.pdf>

Grading:

Homeworks:	10%
Writing Projects:	30%
Midterm:	30% (covering Sections I and II)
Final:	30% (covering Sections I - Section IV)
Grading Scale:	90-100% A; 75-89% B; 60-74% C; 40-64% D; 0 - 39% F

Attendance Policy: Attendance is not required, but students are responsible for *all* material presented in class, including announcements of exam dates, handouts, etc. Lecture notes, homeworks, etc. are available for downloading from my website. Students are kindly requested to refrain from the use of cellphones, etc. during class time.

Exam Policy: In exceptional cases, students may be excused from taking an exam at the scheduled time. To be so excused, the student must:

- 1) Notify Professor DeJong of an inability to take the exam prior to the scheduled time of the exam; or,
- 2) Furnish evidence of calamity.

Make-up exams will not be less demanding than the original exam.

Students with Disabilities:

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both myself and the Office of Disability Resources and Services, 216 William Pitt Union, (8-7890) as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course. Their web site is <http://www.drs.pitt.edu>.

Writing Projects:

Two writing projects will be assigned in the course. Full details are provided on pp. 3 - 5 below. Each project consists of multiple components. One project is associated with the book *Cat's Cradle*; the other is associated with a research assignment.

Originality of all projects will be assessed using services provided by Turnitin.com; details are available at: <http://www.cidde.pitt.edu/turnitin/>

If incidents of suspected plagiarism arise, they will be dealt with following University policy. For details, consult: <http://www.as.pitt.edu/faculty/policy/integrity.html>

Students who wish to obtain help with their writing are urged to consult the University of Pittsburgh Writing Center, run by the Department of English. Details are available at: <http://www.english.pitt.edu/writingcenter/>

Pay close attention to the due dates specified for each component of each assignment. Missing a due date by up to three days will result in a one-grade deduction; missing a due date by more than three days will result in a zero.

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Reading List and Course Outline:

<i>Section I: Introduction and Mathematical Background</i>	Textbook Ch. 1, Appendices A and C; Lucas paper, Jones & Romer paper.
Ia. Course Introduction	
Ib. Data: The Penn World Tables	
Ic. Mathematical Background	
Id. Modeling Production	
<i>Section II: The Solow Model</i>	Ch. 2, Ch. 3
IIa. The Basic Solow Model	
IIb. The Solow Model with Technological Progress	
IIc. The Solow Model with Human Capital	
IId. The Empirical Performance of the Solow Model	
<i>Section III: The Engine of Growth</i>	Ch. 4, Ch. 5
IIIa. The Economics of Ideas	“Technology Quarterly”, <i>The Economist</i>
IIIb. The Engine of Growth	
<i>Section IV: Growth and Development</i>	Ch. 6, Ch. 7
IVa. Development: Reaching the Frontier	
IVb. Investment, Infrastructure, and Growth	

Important Dates

(Subject to revision: keep posted)

T Jan. 12:	Computer Tutorial; HW1 Assigned
TH Jan. 21:	HW1 Due, HW2 Assigned
T Feb. 2:	HW2 Due, HW3 Assigned
TH Feb. 11:	HW3 Due, HW4 Assigned
TH Feb. 18:	Cat’s Cradle Project Due: 1 st Submission
T Feb. 23:	Cat’s Cradle paper returned, HW4 Due
T Mar. 2:	Cat’s Cradle Revision Due
TH Mar. 4:	Midterm (covering Sections I and II)
TH Mar. 18:	Research Proposal Due: 1 st Submission
TH Mar. 25:	HW5 Assigned
T Mar. 30:	Revised Research Proposal Due
TH. Ap. 1:	HW5 Due
T, TH Ap. 6, 8:	Poster Presentations
TH Ap. 22:	Final Project Submission
FRI Ap. 30:	Final Exam, 2:00 PM – 3:50 PM (covering Sections I – IV)

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General Guidelines on Homework

All homework assignments are due AT THE BEGINNING OF CLASS TIME. Assignments not received by the end of class time at the specified date cannot be accepted, as answer sheets will be distributed in class. Assignments should be stapled, and submitted on paper free from shredded edges.

General Guidelines on Writing Projects

Assignments associated with written projects are due at the dates indicated below DURING CLASS TIME. Missing a due date by up to three days will result in a one-grade deduction; missing a due date by more than three days will result in a zero.

All assignments are to be turned in in two forms: via hardcopy, and electronically either via floppy disk or email.

All assignments are to be typed using a 12-point font, double-spaced, either in Word or WordPerfect.

Citations and references incorporated in writing assignments should adhere to MLA guidelines. For guidance, see the list of examples in the English Literature Program's "Avoiding Plagiarism", available at http://www.englishlit.pitt.edu/lit_plagiarism.html#L

For assignments involving revisions of previously submitted work, three things are to be turned in: the revision (both hard copy and electronically); the original document (hard copy only); and typewritten notes providing a summary of the changes made in the revision.

Project Description, *Cat's Cradle*

This project involves a critical assessment of *Cat's Cradle*. After reading the book, you will write a 5 – 7 page paper that offers insights into the message of the book, and into the question of how this message relates to the relationship between technological development and economic growth emphasized in class. The paper must address, although not necessarily exclusively, the following: what is the primary theme of the book?; what is the relevance of this theme towards the study of economic growth?; what is your personal opinion regarding the primary message you think the book is seeking to convey?

A first draft of this paper is due on Thursday February 16, in class. Class time on that day will be devoted to a general discussion of the book; attendance on this day is required. I will return this draft, with comments, on Tuesday, February 21. The final draft of this paper is due on Tuesday, February 28, in class. In revising the paper, you must address the issues raised in my comments. Also, if ideas that arise in the classroom discussion prompt you to expand upon and/or modify your original thinking regarding the book, you may incorporate additional modifications in your final version. If you choose to make such modifications, be sure to make specific reference to relevant portions of the classroom discussion that led you to make these modifications.

This project will constitute 10% of your final grade. 70% of your grade on this project will be based on the first draft, and 30% on the final version.

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Project Description, Independent Research Assignment

In this assignment, you will apply tools being developed in the course to study the growth performance of one or more of the 152 countries included in the Penn World Table data set. For each country, the data set contains detailed information regarding growth performance, as well as a wide range of information regarding the macroeconomy. We will familiarize ourselves with the data set in class and through occasional homework assignments. The project must feature the following elements:

- a sharply defined, empirically oriented research question;
- relevant background information regarding the country or countries under investigation (e.g., location, size, population, industry mix, etc.);
- a description of growth performance;
- a discussion of how theory provides guidance regarding the question to be addressed;
- and an empirical analysis of the question.

Beyond these constraints, a variety of questions may be addressed in the project. Examples of acceptable and unacceptable questions are provided below.

The assignment consists of three components. The first involves an identification of the specific question(s) to be addressed in the project; an outline of the plan you intend to follow in addressing the question(s); a presentation of background information (mentioned above) regarding the country or countries that will comprise your investigation; and a preliminary overview of the country's or countries' growth experience(s). Examples of specific questions that may be addressed include:

- How has the adoption of (insert specific government policy to be investigated) affected growth?
- How has the occurrence of (insert specific exogenous event to be investigated, e.g., war, oil shock, famine, etc.) affected growth?
- Evaluating growth performances across a select group of countries, can (insert one of many possible attributes such as openness to international trade, climate, etc.) potentially be identified as having a positive/negative impact on growth performance?

These examples are not exhaustive: use your interests and imagination to expand the possibilities! However, the following type of "question" is not acceptable as a research topic:

- What has the growth performance of (insert country here) been like?

Note that a description of growth performance is one component of the assignment, but cannot serve as the primary research "question".

The expected length of this component of the assignment is 8 – 12 pages. This may include up to two pages of graphs (note that many graphs may be fit on a single page), and does not include your title page nor pages devoted to the citation of references. Please identify the question(s) you intend to address in the first paragraph of your proposal. You must identify all sources used in compiling background information, characterizing growth performance, etc. Please cite sources directly in the text when they are relevant, either parenthetically or in footnotes. In presenting background information, provide specific details. For example, avoid statements like: The predominant industry in Nigeria is agriculture. Instead, use: Agriculture accounts for approximately 60% of GDP in Nigeria (source: World Bank, 2002).

Finally, in outlining the plan you intend to follow in addressing your question(s), use theoretical considerations (gleaned, e.g., from the Solow model) for guidance.

The second component of the assignment is a classroom presentation in which the findings of the project are presented. The presentation will take the form of a “poster session”, in which the following information is provided: what is the main question under investigation in this project?; how is this question being addressed?; what are your findings regarding this question? The expected length of your presentation is 10 – 12 minutes.

The third component is a final write-up of the project. The final write-up will include an appropriately revised version of the background information, etc. provided in the first component of the project, as well as a presentation of results regarding the main question under investigation. The presentation of results should incorporate comments received during your poster-session presentation. The expected length of the final write-up is 18 – 22 pages, once again exclusive of your title and reference pages (but including up to four pages devoted to figures and tables).

This assignment will constitute 20% of your final grade.

Due dates and point values of project components:

First component:	TH, March 18:	10 points
Revision of first component:	Tues., March 30:	30 points
Class presentations:	Tues., TH, Ap. 6, 8:	20 points
Final submission:	TH, Ap. 22:	40 points

In turning in the revision of the first component, please also turn in the original submission, along with typewritten notes providing a summary of changes made in the revision.

The final submission date and time is FIRM. All materials are to be delivered to my office at that time. Checklist for final submission:

- hard copy of final draft
- electronic file containing final draft
- typewritten notes outlining changes made following the revision of the first component
- hard copy of revised first component