Economic Growth
220:370:01
Tuesday and Thursday 2:50 PM - 4:10 PM CA-A4
Final Exam: May 8, 2015 12:00 PM - 3:00 PM in Class
Prof. Paczkowski

Spring, 2015
Published: January 4, 2015

My office hours are:

Tuesday and Thursday 12:30 PM - 2:30 PM
and by appointment

Office Hours Location:
Student Activity Center (SAC) on George St. CAC
732-932-7363

The best place to find me is before class in the classroom. I can also be reached by email at paczkows@economics.rutgers.edu

Please feel free to see me with any questions. Do not wait until the end of the semester!

You can also reach me via the Economics Department’s secretary in New Jersey Hall. You can leave a message for my mail box, but this is the least effective way to reach me.
1 Course Objectives

Economic growth is, perhaps, the oldest subdiscipline in economics, having its roots in the
nature and raison d’être for Adam Smith’s *The Wealth of Nations*. This is a subject area
that gets at the very heart of economics: making people better off in the long run. Because of
the vast expanse and importance of growth, a full study has to encompass not just economics
but also history, economic and otherwise.

1.1 General Objectives

The general objectives of this intense upper level elective course are to provide you with an
understanding of...

1. the fundamental theories explaining economic growth;
2. the importance of different sectors (e.g., technology, education) of the economy;
3. the historical connections between growth and the rise and fall of the Great Powers;
4. the pattern of economic growth in the U.S. and worldwide;
5. policy options to enhance economic growth.

1.2 At the End

At the end of the semester, you will be expected to...

1. address all the Leading Questions from Lecture 1;
2. discuss the merits of the Neoclassical Growth Model;
3. interpret economic growth data;
4. analyze and interpret simple econometric models of growth rates;
5. identify and discuss problems with pursuing a growth policy;
6. identify and discuss major economic issues of the day with respect to promoting or
hindering growth;
7. take a position and defend it regarding major economic issues.

\footnote{The full title is *An Inquiry into the Nature and Causes of the Wealth of Nations.*}
2 What the Course Is and Is Not

To a good extent, this is a hands-on course, but not in the sense that you will be given homework with pencil and paper assignments. You will be asked to debate growth issues and draw your own conclusions about key drivers of growth and policies for promoting growth. Also, because of the long-run nature of the topic - spanning centuries - an emphasis is placed on theories. Some of the theoretical discussions will get heavy at times although an effort will be made to get to the essence of the theories and not get mired in mathematical detail.

3 Relation to Other Economics Courses

Because of the general nature of the topic, there is some overlap with other economics courses. In particular, Development, Capital Markets, Macroeconomic Theory, Comparative Economic Systems, and any course specializing in a particular region (e.g., Japan) may be similar. This course differs by its emphasis on long-run trends, patterns, and generalities.

4 Upper Level Economics Elective Course

This is an upper level Economics elective course.

5 Prerequisites and Background

Please note the prerequisites…

5.1 Course

320 (or) 203, 321, (or) 204, and Econometrics 322

5.2 Math/Stat Requirement

Calculus will be used and may be heavy at times. Reviews are built into the lectures where necessary. In general, however, simple mathematics including algebra will be used where appropriate with explanations given in class when a difficult concept is presented. After that, it is assumed that you understand the concept if questions are not asked. It is your responsibility to ask questions. Most of the time, however, just numerical calculations will be done. You are expected to be able to handle all mathematics – nothing is beyond your level!

You will be asked to derive something on the exams. Derive means to show step-by-step in a clear, logical, and organized fashion where a formula comes from. These derivations are not beyond your ability.
5.3 Econometrics

Econometrics is a prerequisite for this course, therefore you will be expected to interpret econometric output.

5.4 Calculations

You will be asked to do some (not many) calculations, both in class and on the exams.

5.4.1 Calculators

Since numerical calculations will be done in class, you will need a calculator with the usual functions. You can use a calculator for the exams, however, you will not get any credit (i.e., you will get a zero) for merely writing down an answer from the calculator. For any credit at all, you must show that you know how to do the problem, not that you know how to use a calculator. You will not be allowed to use a cellphone, smartphone, iPad, tablet, or any PDA that has a calculator. They do not have the functionality to do the required work.

6 Textbook

There is no textbook.

7 Lecture Notes Online

I am against putting lecture notes online. However, as a courtesy, notes will be made available on Sakai. The online notes are not meant to replace your responsibility to attend class and take notes.

8 Reading Assignments

You will be asked to read a large number of articles, mostly available on the web. You are expected to read all assignments and be prepared for class discussions. Discussions will be a major part of the course and your grade. You are responsible for all the readings, discussions, and lectures.

8.1 How to Read Articles

Approach each article looking for central ideas and concepts, not details. Almost all articles are well structured with a literature review in the beginning, a general outline of the author’s argument, the analytical detail, and then a summary. Concentrate on the literature review and summary. Look for how the general ideas relate to other concepts you already know. Some of the articles may be mathematical or statistical; skip these sections. Focus on issues and ideas.
9 Groups

Groups will be created at the beginning of the semester to discuss articles on growth topics such as (but not necessarily limited to)... 

1. saving  
2. technology  
3. science and R&D  
4. education  
5. population growth  
6. the financial system  
7. health  
8. democracy  
9. energy policy  
10. global warming

The purpose of these group sessions is to have you become familiar with the literature on a growth topic.

9.1 Debates

To add more flavor to the course, the groups will be divided into debating teams at different times in the semester. One team will be assigned to take a Pro position (in favor of position) of a proposition and another team will be assigned to take a Con position (against position) of a proposition. Team members will each present a statement. The audience will ask questions – attack the two teams – and also judge which team "wins." All debaters will receive points as determined by their peers. All non-debaters will act as evaluators and will themselves receive a grade for their evaluations.

The purpose of the debates is to have you take a position on a growth issue and defend it using the literature you read.

Please note: failure to appear for a debate either as a debater or an evaluator will result in a zero for that debate. There will be no makeups for a missed debates or evaluations. No exceptions – No excuses.

10 Exams

There will be two (2) exams: a midterm and final.
10.1 Schedule
The final exam has a definite date and time. The midterm exam date is APPROXIMATE.

10.1.1 Midterm Exam Schedule
The midterm exam will be APPROXIMATELY...

<table>
<thead>
<tr>
<th>Exam</th>
<th>Approximate Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm</td>
<td>March 12</td>
</tr>
</tbody>
</table>

Do not plan to be away or miss class for any reason based on this APPROXIMATE date since the actual date depends heavily on how fast we cover material. There will be no make-up for a missed midterm exam. No exceptions – No excuses. Please note the word APPROXIMATE.

10.1.2 Final Exam Schedule
The final is already scheduled by the University. Please refer to the following table for your section:

<table>
<thead>
<tr>
<th>Section</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>May 8</td>
<td>12:00 - 3:00 PM</td>
</tr>
</tbody>
</table>

The University posts the final exam dates and times at...

http://scheduling.rutgers.edu/springfinals.shtml

It is your responsibility to verify the date and time.

10.2 Your Responsibility
Although the exam dates and times are listed in this syllabus, it is your responsibility to make sure that you know exactly when the exams will be given and that you are there for them. Verify the dates! Basically – do not cut class or miss any exam announcements. Also, do not plan to leave the University before the final exam period is officially over. If school is open, then it is your responsibility to be here.

10.3 Comprehensiveness
The two (2) exams are comprehensive and will focus on grand themes and issues. They are meant to synthesize the material. The midterm exam explicitly covers only the material in the reading assignments and covered in class since the first lecture.

10.4 Cumulative Final
The final exam is cumulative.
10.5 Exam Content

Part of both exams will be short essays on...

1. all readings...
2. country discussions
3. debates
4. any and all class discussions.

The questions will be, but are not limited to, compare and contrast, explain, interpret, discuss. You are expected to write clear, concise, and coherent essays. In addition, you must write legibly so I can read what you wrote – a point is deducted otherwise.

10.6 Exam Grading

Your exam answers are graded on completeness (just having a key word does not suffice), relevancy to the question I asked (many students do not answer my question), and neatness (points are deducted if I cannot read an answer). Short ESSAY answers are required. Essays consist of whole sentences and paragraphs correctly worded and written. Anything else is a zero. In particular, essays consisting of bullet point lists will not be accepted. Points are deducted if the answers are not in acceptable essay form. In short, it’s not only what you say, but also how you say it that counts.

10.7 Makeup Exams

There are no makeups for missed exams due to tardiness or being absent. No exceptions – No excuses. A make-up exam is allowed only after prior permission is granted to miss that exam or there is a note from the University and appropriate documentation (e.g., medical, court order). It is your responsibility to notify the University of a medical or personal problem (e.g., death in the family) resulting in a missed exam. Excuses are not accepted; only proper documentation will be accepted. A make-up exam is not necessarily the same as the regular exam. Obviously, a make-up is not given for the final.

11 Grades

All debates, evaluations, exams, papers, and presentations have points. The points are:

<table>
<thead>
<tr>
<th>Points</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Very well written; to the point; correct; shows deep understanding</td>
</tr>
<tr>
<td>3</td>
<td>Minor errors; some minor writing issues; displays deep understanding</td>
</tr>
<tr>
<td>2</td>
<td>Major errors; major writing issues; displays understanding but without depth</td>
</tr>
<tr>
<td>1</td>
<td>Major errors; major writing issues; insufficient; displays only minor understanding</td>
</tr>
<tr>
<td>0</td>
<td>No answer or work; displays complete lack of understanding</td>
</tr>
</tbody>
</table>
Debate evaluations will be discussed in class.

11.1 Weights
Grades are determined on a points-earned basis with the following importance weights:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm</td>
<td>30%</td>
</tr>
<tr>
<td>Final</td>
<td>30%</td>
</tr>
<tr>
<td>Debate</td>
<td>20%</td>
</tr>
<tr>
<td>Debate Evaluations</td>
<td>20%</td>
</tr>
</tbody>
</table>

11.2 Curves
A straight curve – **no other curve** – is used...

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% to 100%</td>
<td>A</td>
</tr>
<tr>
<td>88% to less than 90%</td>
<td>B+</td>
</tr>
<tr>
<td>80% to less than 88%</td>
<td>B</td>
</tr>
<tr>
<td>78% to less than 80%</td>
<td>C+</td>
</tr>
<tr>
<td>70% to less than 78%</td>
<td>C</td>
</tr>
<tr>
<td>60% to less than 70%</td>
<td>D</td>
</tr>
<tr>
<td>Less than 60%</td>
<td>F</td>
</tr>
</tbody>
</table>

12 Appeals
Students occasionally feel that a grade is too low. In such a case, an appeal consisting of one (1) double spaced, typed page plus a copy of the exam or paper with my comments on it may be submitted at any time up to and including the final exam, but not beyond.

12.1 Appeal Content
The appeal should contain an argument as to why a particular grade should be changed. Not all appeals are accepted. An appeal that says, for instance, ”But I studied hard” or “I worked all semester and just got a C - I deserve better” or “You graded me unfairly” is not acceptable.

12.2 Appeal Reviews
Appeals are reviewed only at the end of the semester and only when it is believed that a grade may be changed. Do not ask if I reviewed an appeal at any point in the semester - the answer is “No”. Appeals are only reviewed at the end of the semester in borderline cases.
12.3 Submitting Appeals

Appeals can be submitted anytime up to and including the time you submit your final exam. You cannot submit any more appeals once you submit the final exam.

13 Final Course Grades

Final course grades will be available in the usual way. I am not allowed to email any grade information.

14 Important Dates

Key dates for you to track are:

- Last Day for Undergraduates to drop a course without a ”W” is January 27
- Last Day for Undergraduates to add a course is January 28
- Last day to Withdraw from the University (end of 12th week) for the Spring 2015 Term is April 20

15 Attendance Policy

Attendance is taken at the beginning of each class. The attendance sheet will be collected within 10 minutes of the beginning of class and you will not be allowed to sign it after that – so you need to be in class on time.

Students are expected to attend all classes. If you expect to miss one or two classes because of illness or a family emergency, please use the University absence reporting website [https://sims.rutgers.edu/ssra/](https://sims.rutgers.edu/ssra/) to indicate the date and reason for your absence. An email is automatically sent to me.

Note that using the Absence Reporting system does not excuse you from class. It just informs me that you will be absent – but not excused. You must still produce documentation if you miss an exam or graded class activity. This is clearly noted on the Rutgers website [https://sims.rutgers.edu/ssra/](https://sims.rutgers.edu/ssra/):

"Please note: it is up to your instructors to determine how to handle your absence from classes, labs, or exams. Reporting your absence does not "excuse" you. It notifies your instructors, a courtesy that provides an opportunity for you to contact your instructor directly about missed work. In addition to reporting your absence here, we encourage you to contact your instructors directly.

You must let me know at least one week ahead of time regarding a religious holiday conflict with an exam or an assignment.
15.1 General Rutgers Policies
University religious holiday policy is at...

http://scheduling.rutgers.edu/religious.shtml

An interfaith calendar can be found at...

http://www.interfaithcalendar.org/index.htm

University attendance policy is at...

http://sasundergrad.rutgers.edu/academics/courses/registration-and-course-policies/attendance-and-cancellation-of-class

16 Late Submissions
There is a very strict policy regarding late submissions.

16.1 Late Papers
Late papers will not be accepted under any circumstance; they receive an automatic zero.

16.2 Where to Submit Papers
All papers must be handed to me personally in class. Never email me an assignment.

16.2.1 Leaving Papers
Papers placed in my mailbox, left on my desk, or shoved under my office door will not be accepted under any circumstance; they are automatic zeros.

16.2.2 Emailing Papers
Emailed papers will NOT be accepted under any circumstance; they are automatic zeros. Never email me an assignment.

16.3 Exceptions
There are none.
17 Laptops and Recording Devices in Class

As a general policy, you will not be allowed to use a laptop or tablet computer in class or record the class lectures in any manner, shape or form. If you must have the lecture notes with you, please print them and bring them to class.

Please note: Laptops, tablet computers and recording devices are not allowed in class. No exceptions – No excuses.

18 University Code of Student Conduct Summary

A university in a free society must be devoted to the pursuit of truth and knowledge through reason and open communication among its members. Its rules should be conceived for the purpose of furthering and protecting the rights of all members of the university community in achieving these ends.

All members of the Rutgers University community are expected to behave in an ethical and moral fashion, respecting the human dignity of all members of the community and resisting behavior that may cause danger or harm to others through violence, theft, or bigotry. All members of the Rutgers University community are expected to adhere to the civil and criminal laws of the local community, state, and nation, and to regulations promulgated by the university. All members of the Rutgers University community are expected to observe established standards of scholarship and academic freedom by respecting the intellectual property of others and by honoring the right of all students to pursue their education in an environment free from harassment and intimidation.

18.1 Academic Integrity Policy Links

Here’s the link for the academic integrity policy...


There are two classes of violations: separable and non-separable. Separable offenses are major offenses including cheating on an hourly or final exam. They are ”separable” because a student risks suspension. Non-separable are minor offenses like cheating on a homework. Here is a link to the Office of Student Conduct website for more information:

http://studentconduct.rutgers.edu/academic-integrity

19 Students with Disabilities

Full disability policies and procedures are at...

http://disabilityservices.rutgers.edu/
Students with disabilities requesting accommodations must follow the procedures outlined at...

http://disabilityservices.rutgers.edu/request.html

20 Departmental Learning Goals

The Economics Department has established Learning Goals for its undergraduate majors. These Goals are listed on the following page. Please pay especial attention to the Economic Numeracy goal.
Learning Goals for Economics Majors

**Economic Literacy** Students who complete the major in economics should understand and be able to articulate, both orally and in writing, the core economic principles, concepts and theories that form the foundation for modern economic analysis and economic research.

**Economic Numeracy** Students who complete the economics major should be familiar with the tools, techniques and methods of empirical economics. They should be able to analyze data using computer applications and should be familiar with regression methods and other statistical techniques. They should be able to read and assess general interest articles on economic topics. In addition, they should be able to understand and evaluate key findings in published economic research from a wide range of sources including academic economists, public policy think tanks, and government agencies.

**Economic Citizenship** Upon completion of the major students should be able to apply their understanding of core concepts and quantitative tools to analyze and research real world problems and evaluate alternative economic policy proposals on microeconomic and macroeconomic issues.

**Economic Scholarship** Qualified majors should have an opportunity through such avenues as advanced coursework, faculty interactions, national and local competitions and honors courses and programs to utilize up-to-date methodological tools and become fully engaged in economic research and issues on the frontiers of economics.