The University of Florida
Department of Economics

ECO 4934, Economic Growth
Fall 2017 Syllabus

Instructor:
Jonathan Adams adamsjonathan@ufl.edu
Office: MAT 333   **Office Hours:** Wednesday 9:30 am - 11:30 am

Teaching Assistant:
Armand Kapllani akapllani@ufl.edu

Class Schedule:
Tuesdays and Thursdays, Periods 3-4 (9:35 am - 11:30 am)
Room: MAT 107

Recommended Text:
David Weil, *Economic Growth*

Prerequisites:
ECO 2013, ECO 2023, ECO 3101, & ECO 3203 or ECO 3713 (Up to intermediate micro/macro)
Some specific tools you will need to apply from your intermediate micro and macro classes
include: solving consumer problems with constrained optimization and multivariate optimization,
and characterizing dynamics of economic aggregates with differential equations. We will review
these tools. But you will be expected to understand several concepts without further
explanation, such as: macroeconomic aggregates including GDP and investment, and
consumer concepts including utility and budget constraints. The course will also require a
considerable amount of calculus, so students should be comfortable with basic calculus, and
should be familiar with multivariate calculus. Finally, students should be comfortable with basic
statistics.

Midterm Exam:
A midterm will be held during the 8th week of the semester, on Thursday Oct 12th. It will be
held in class.

Final Exam:
A comprehensive final exam will be held on Thursday December 14th from 5:30-7:30pm.

Exam Philosophy:
The theory portion of the exams will test your understanding of the mathematical theories that
you learn during lecture and on the problem sets. They will not generally be directly from the
notes/homework though; usually they will feature a curveball to test your ability to solve

economic models and characterize dynamics without relying on rote memorization. The best way to prepare for these sorts of problems will be to make sure you fully understand the theoretical problem sets.

The applied portion of the exams will test your understanding of economic forces, empirical patterns, and broad conclusions from the lectures, readings, and problem sets.

Problem Sets:
There will be problem sets assigned most weeks. They will include data exercises and theory exercises. The best way to learn economics is to DO economics! So please take the opportunity to carefully learn from the problem sets.

Problem sets will always be assigned at least a week before they are due.

You may submit the data exercises in groups of up to three people. Theory exercises must be submitted individually.

The data exercises should be typewritten. The theory exercises may be handwritten, but be aware that illegible writing will be ignored and the work will be treated as incomplete. Economics involves a fair amount of math, so if you would like to typewrite your theory exercises I recommend the use of LaTeX instead of MS Word, especially if you are considering continuing with economics after college. I suggest the open source program Lyx (www.lyx.org) as a front-end for LaTeX. In other words, this free program makes LaTeX "as easy to use" as MS Word. You can find a useful tutorial at (http://www.youtube.com/watch?v=m4cEAVmLegg).

Grading:
Problem sets will account for **30%** of your grade. The midterm will account for **25%** and the final will account for **35%**. Class participation will account for the remaining **10%**. After all the scores are available, I will assign letter grades based on a curve. The specific distribution of the grades will depend on the class's overall performance.

Your lowest problem set grade will be dropped. I will also allow each student one no-questions-asked 48-hour extension for a late problem set if they email the TA before the deadline. These are lenient policies, so *no other extensions or late problem sets will be allowed under any circumstances.*

Course Schedule
The fun part of the syllabus! We are going to learn a lot of fun and exciting economics this semester. Relevant chapters in the Weil textbook are listed for your supplementary reading. From time to time, I will suggest specific passages that you will be required to read. "Marquee theories" are economic models that you will learn in class and on problem sets, and will show up in some shape or form on an exam. The class will be roughly ordered as follows, although I reserve the right to adjust the schedule as the course progresses:

Topic	Weil Chapters	Marquee Theory	Data Lab
1. Basic Facts of Economic Growth	Ch. 1		Lab 1C
2. Capital	Ch. 2-3	*Neoclassical (Solow) Model*	Lab 3B
3. Productivity	Ch. 7		Lab 7B
4. Demographics	Ch. 4		Lab 4B
5. Pre-Industrial Growth		*Classical (Malthusian) Model*	
6. Human Capital	Ch. 6	*Endogenous Growth (Lucas) Model*	Lab 6B
7. Geographic Determinants of Growth	Ch. 15		Lab 15B
8. Transition to Modern Growth		*Transition (Becker) Model*	
9. Institutions	Ch. 12		Lab 12B
10. Technology and R&D	Ch. 8	*R&D (Romer) Model*	
11. Growth in the Open Economy	Ch. 11		Lab 11B