

Econ 6440: Economics of Technology/Econ 4321: Tech and Entrepreneurship Spring 2016

Instructor: Dr. Juan Moreno-Cruz (morenocruz@gatech.edu) -- Office Hours: by appointment

Teaching Assistant: Alaina Totten (alainatotten@gatech.edu) -- TA Office Hours: M 14:00-16:00

Class Meetings: TR 12:05 - 13:25, Skiles 254

Course Description: The purpose of this course is to introduce students to the role that technology and technological innovation play in human society. We will look at the basics of economic production and will explore in detail the macroeconomic impacts of specific technological innovations.

Readings: There is no textbook. I will provide readings for each topic and discuss them during class.

Course Requirements and Grading:

This course requires time and preparation. Class participation is imperative. As an incentive to show up, I will verify class participation. Late arrival is equivalent to a no-show. There are also two (2) in-class pop quizzes at the beginning of the class.

There are 5 reports on papers to be done during the semester. During the second part of the course, we will look at the impact that particular technologies had and still have on the economy. You will write a report about 5 of the papers covered during that part of the class.

Our (mandatory) in-class midterm is scheduled for March 10, 2016. Registrar schedules the final exam. No makeup tests for midterm will be administered. If there are exceptional circumstances and you can't take the regularly scheduled test, you must notify me before the regularly scheduled test with a legitimate reason along with official documentation. With an acceptable excuse, the final exam will be used to determine the course grade.

Grade determination: Grades are computed as follows: a total of 100 points, 25 points for reports (5 points each), 30 points for the midterm, 30 points for the final exam, and 15 points awarded as follows: Up to 5 points for attendance (.5 for each class attended up to 10; on-time arrival required) 5 each for 2 pop quizzes (absent or late counts as zero).

Grade scale:

A's	Above 90%
B's	Between 80%-90%
C's	Between 60%-80%
D's	Between 50%-60%
F's	Below 50%

Course Guidelines

Econometrics requires love, focus and attention. When you are in class, pay attention. Listen. Ask questions. Do not bring food to class (non-alcoholic drinks are ok) and leave electronics and other toys shut off and put away. Drones are not allowed. **Any violation of the Honor Code will be referred to the Dean of Students Office.**

Tentative Course Schedule

Date	Topics we learn
Jan 12	No Class
Jan 14	Introduction
Jan 19	Technology and Production
Jan 21	Profit Maximization and Cost Minimization
Jan 26	Growth accounting – Solow model
Jan 28	Technological change
Feb 2	Drastic innovations and the Macro-economy
Feb 4	Agriculture and Malthus
Feb 9	Beer, Wine and Distilled Spirits
Feb 11	The Columbian Exchange
Feb 16	King Cotton: Xi Mao's guest lecture.
Feb 18	Coal, Steel, and Steam Engines
Feb 23	Canals and Railroads
Feb 25	Planes and Cars
Mar 1	Gun powder, canons and guns
Mar 3	Cathedrals
Mar 8	Department stores
Mar 10	Midterm
Mar 15	Refrigeration
Mar 17	Electricity
Mar 22	Telephone
Mar 24	Spring Break
Mar 29	Spring Break
Mar 31	Radio and Television
Apr 5	Computers
Apr 7	Stata Lab
Apr 12	Stata Lab
Apr 15	The Internet
Apr 19	3D printing
Apr 21	Autonomous cars
Apr 26	Technological Innovation and the World
Apr 28	No Class

Note: I will generally follow the above sequence. I may add or subtract topics.