Syllabus: EST 606 Economics of Technology, Policy, and Innovation
Spring, 2018
Deb Dwyer

Department of Technology and Society
Course Location: Computer Science, Seminar Room, Wed. 9:10-11:50

EST 606 ECONOMICS OF TECHNOLOGY, POLICY AND INNOVATION
3 Credits
Instructor: Professor Debra Dwyer
632-1167
Office Hours: Wed. 1-3

COURSE DESCRIPTION/LEARNING OBJECTIVES:
This course will be the second in a two part economics sequence that builds on the tools from Economics and Public Policy to begin to evaluate sectors of the economy related to technology and innovation. It is an applied economics course that will cover the literature on the economics of technology and innovation. Technology and Innovation will be assessed using criteria of effectiveness, efficiency, equity, economic growth, and economic stability. How technology and innovation impact industry, which industries, and how well advances are being implemented will all be examined from the economist’s perspective. This course will also include professional development as part of the learning objectives. For example, teamwork in lecture activities will be part of the class participation grade. Critical reading of the relevant literature is a key part of this course.

REQUIRED TEXTS:
The Economic Analysis of Public Policy, WK. Bellinger, Routledge, 2007

TEACHING STRATEGIES: Lecture through powerpoint, handouts, black board, lecture activities and classroom discussion. Lecture Activities are sometimes used to assess mastery of material already covered. Other times it is used to tie together what has just been done to what comes next. These activities are designed to be thought-invoking and promote interactive learning.

PRE-REQUISITE: EST 605 or permission of instructor

METHOD OF EVALUATION: There will be one in-class midterm exam, one written assignment and one presentation. The weights on these assignments are as follows:

Exam: 40%
Term Paper: 35%
Presentation: 15%
Class Participation: 10%
Exam: One exam will be given in this course on March 28. The exam will begin at 9:00am and run until 11:40am. Late arriving students will not be given extra time so please be prompt on exam day. The exam will test understanding of the core components of policy development and evaluation – which will be needed to succeed in the final exam which is the term paper/presentation.

Make-up Exam Policy: The date of the exam is already posted. If you have a known conflict with this date please let me know within the first two weeks of the semester. For example, weddings, out of town conferences, or other work-related events that dominate this class must be made known to me as soon as possible. I will give make-up exams for illnesses that require hospitalization or make it impossible to be in class with appropriate documentation. Death of a family or friend would also require documentation.

Term Paper/Presentation: The term paper is a policy evaluation essay preferably in a policy area that you wish to pursue your research agenda. The presentation is expected to be 20 minutes with 5 minutes of Q&A to follow and is a summary of the paper you have written and turned in. You will be assessed based on meeting the following objectives in this project – both in the paper as well as in communicating it to the class through presentation:

- Define the proposal/policy/program you will evaluate and provide background/literature
- State the objectives behind the policy based on this background and literature as well as your own interpretations of the objectives
- Evaluate the policy in its success in meeting objectives given criteria taught in class – you must have evidence based on positive analysis from the literature. At least one published journal article on this policy should be performed and the findings synthesized into an assessment of where the literature stands on the potential for the policy you are evaluating to succeed in meeting the objectives you have defined. If not much has been done by way of evidence, you must define the criteria and propose a plan for evaluation – providing some preliminary evidence from raw data.

Appendix A of the textbook (Burdach) gives an example of a “real world policy analysis”. The format of the analysis is what I would read through because it is organized well - the focus for the evaluation is on the effectiveness of the policy (propensity to meet goals). HOWEVER – they do their own analyses to quantify the effect of the policy in meeting objectives. I DO NOT expect you to perform cost benefit analyses yourself. I expect that you review literature and come up with valid arguments to demonstrate effectiveness, efficiency and equity and any other relevant criteria based on it. It will likely require that you synthesize the literature’s findings into a cost-benefit framework.

Class Participation: Attendance/Participation in the presentations is mandatory. You must be there for everyone’s presentations, not just your own. You will be evaluated on your engagement in these sessions. Each student is expected to ask at least one question of one of their peers during the Q&A sessions. Each student will be assigned one peer to evaluate on their performance as a presenter. They will receive the paper for that presentation in advance and will be expected to briefly discuss the merit of it as well.

Due Dates:
March 28: Brief Proposal for project: Policy you have selected along with an outline of your policy analysis implementation plan. This includes literature you have been reviewing. What is due on the 29th is a plan for the paper/presentation given the topic you pre-selected so that I can provide feedback as to whether or not you are on the right track.

May 11th: Paper Due Date

April 25th and May 2nd: Presentations: Students will present their paper arguments to the class on these dates. Each presentation should be between 15 and 20 minutes. Details of the presentation content, format, and requirements will be made available as the time approaches.

Extra Credit: There will be several opportunities for extra credit on quizzes and the exam through bonus questions. Each student will earn an overall grade for extra credit (percentage of total points available that is earned). If that grade is higher than one of the other grades (ie quiz, final, or essay), the extra credit grade will replace 10% of that lowest grade. For example, if a student earns 95% of the extra credit and got an 85 on the final – I will reweight the final to only count as 30% of the overall grade and 10% will be the extra credit grade).

TOPIC OUTLINE – tentative schedule:

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<tr>
<th>Date</th>
<th>Lecture</th>
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<tr>
<td>Jan 22</td>
<td>Lecture 1: Intro to Econ &amp; Public Policy</td>
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<td>Government and Market Failures</td>
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<td>February 7</td>
<td>Competition and Monopolies</td>
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<td>Airline Industry Case Study</td>
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<td>February 14</td>
<td>Macro: Economic Systems</td>
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<td>Social Welfare Theorems/Arrow’s Impossibility Theorems</td>
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<td>February 21</td>
<td>The Eightfold Path</td>
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<td>Step 1</td>
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<td>Steps 2 through 4</td>
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<td>February 28</td>
<td>Steps 5 through 8</td>
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<td>Analysis Tools Intro (Cost-Benefit)</td>
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<td>March 7th</td>
<td>Risk and Uncertainty</td>
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<td>Examples</td>
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<td>March 14</td>
<td>Spring Break</td>
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<td>March 21</td>
<td>Review for Exam</td>
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<td>March 28</td>
<td>Exam</td>
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<td>April 4 – April 18</td>
<td>Case Study Examples</td>
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<td>April 25 – May 2</td>
<td>Class Presentations (Mandatory Attendance)</td>
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UNIVERSITY POLICIES

Americans with Disabilities Act
If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, 128 ECC Building (631) 632-6748. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information, go to the following website: http://www.ehs.sunysb.edu and search Fire Safety and Evacuation/Physical Disabilities.

Critical Incident Management
Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn, as per the SHTM Academic Policies and Procedures.

Plagiarism Policy
Any act of plagiarism will be taken very seriously in this class. Plagiarism is a form of academic dishonesty. Plagiarism is the use of others’ words and/or ideas without clearly acknowledging their source. Plagiarism occurs when a writer uses another person’s words and/or ideas in a paper without giving credit to the original author. As students, you are learning about other people’s ideas in your course texts, your instructors’ lectures, in-class discussions, and when doing your own research. When you incorporate those words and ideas into your own work, it is of the utmost importance that you give credit where it is due.

Plagiarism takes many forms: The form you might be most familiar with is direct copying of another’s words without using quotation marks and/or without citing the source of those words. If you do quote verbatim from another source, always (a) use quotation marks around the words that are not yours and (b) properly cite the source at the end of the quoted material. Other forms of plagiarism are equally problematic and wrong. One such form is rewording parts of an author’s point (but not others) and not citing that source. Any portion, be it ever so small, of another author’s argument must be cited. If you ‘borrow’ phrases from an author, these phrases must be put in quotation marks and properly cited. A third form of plagiarism is when you reword an author’s words entirely but you keep the authors’ original sentence structure and paragraph structure without proper citation. Whenever you rely on other people’s work (which we all do), just make sure to cite their ideas. See the following sites for help understanding plagiarism:

http://www.indiana.edu/~wts/pamphlets/plagiarism.pdf

Plagiarism, intentional or unintentional, is considered academic dishonesty and all instances will be reported to the Academic Judiciary. To avoid plagiarism, you must give the original author credit whenever you use another person’s ideas, opinions, drawings, or theories as well as any facts or any other pieces of information that are not common knowledge. Additionally quotations of another person’s actual spoken or written words; or a close paraphrasing of another person’s spoken or written words must also be referenced. Accurately citing all sources and putting direct quotations – of even a few key words – in quotation marks are required. For further information on plagiarism and the policies regarding academic dishonesty go to the Academic Judiciary website athttp://naples.cc.sunysb.edu/CAS/ajc.nsf.

Academic Integrity
Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong (see plagiarism policy, above). Faculty are required to report any suspected instances of academic dishonesty, as per the SHTM Academic Policies and Procedures.

Academic Dishonesty
Intellectual honesty is a cornerstone of all academic and scholarly work, including in an on-line format. Penalties for misconduct may vary according to the circumstances of each particular case. Penalties may range in severity from verbal warning to expulsion from the University with the reason recorded on the student’s permanent transcript. Academic dishonesty is a serious offense and will be treated in accordance with the University’s Policies and Procedures Governing Undergraduate Student Academic Dishonesty, which can be located at http://www.uhmc.sunysb.edu/studserv/bulletin/03_SHTM2006.pdf
Writing Center
The Stony Brook University Writing Center, located in Humanities room 2009, supports writing at Stony Brook University. Trained undergraduate and graduate writing tutors help writers through one-on-one tutoring sessions that focus on each individual writer's needs. Writers of all skill-levels at any stage of the writing process are invited to make appointments at the Writing Center. Writers can bring in anything they're working on, be it a creative piece, a personal statement, or a paper for class. Tutors will help writers brainstorm, organize, focus, and develop their written works. To make an appointment on-line, go to http://stonybrook.edu/writrhet/wcabout.shtml.