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I hold office hours on Skype, as the most common requests are for appointments in the evening.

COURSE DESCRIPTION
This course gives an introduction to the policies and institutions of Information Technology and related industries. It will international and comparative issues, though it is fundamentally grounded in the American experience.

Hybrid Class:
This class is listed as a hybrid class, which means that it is taught equally on the internet and in the classroom. It makes heavy use of podcasts as a medium of transmitting lectures so that we can devote the class time to discussions. Over the course of the semester, we will conduct some of our discussions over Skype.

GOALS OF THE COURSE (LEARNING OUTCOMES)
To impart to students the intellectual skills needed to engage policy process for information and related technologies. The course will present an overview of the institutions and information.

For this version of the course, the issue is to understand how the ideas that shape scientific and technical communities create natural gaps between them and the greater industrial society.

This course has are two specific learning outcomes. First, students should be sufficiently knowledgable about the policy issues and institutions that they should be able to research a policy question and feel that gathered all the necessary information and contacted all the important players.

Second, students should be able to formulate a policy and a policy argument in a way that engages fully the existing policies, policy frameworks and institutions.

[4] GRADE COMPUTATION
Course Grade is calculated as follows:

- Class Participation: 40%
- Final paper: 60%

All calculations are done with the standard GW 0-4.0 using the divisions for letter grades given in the GW Bulletin.

**PROJECT:**
The major graded work is the project. It is a 5,000-6,000 word paper that treats some policy aspect of information technology. The project has four major components:

- **Prospects:** Description of project. One page, see sample below
- **Short paper:** a 2,500 word paper plus bibliography. A first attempt to address the policy issue.
- **Draft Paper:** 5,000-6,000 word plus bibliography draft of the paper. It will be returned with detailed notes.
- **Final Paper:** Finished 5,000-6,000 word plus bibliography completed draft of the paper. It must address all detailed notes.

You may include information in appendices, should you believe that you have more than 6,000 words of material. You may reference this material in your paper. However, the grade of the paper will be based on the central text not the appendices.

This project is a policy paper. Policy papers attempt to solve policy problems. They generally do one of three things. They identify a problem and provide a solution for that problem; or they identify a problem, an existing problem for that solution, and then modify that solution; or they identify a problem and an existing solution and critique the existing solution. It is not an academic paper or a speculative document that reviews the literature and suggests how things might ought to be. It should be grounded in a solid, policy framework.

The paper should have the following form:

**Executive Summary**
- One page summary of recommendation of paper

**Statement of problem and summary of recommendation**
- Short, generally less than 750 words, statement of the policy problem and your solution. Describe the problem as quickly as you can and give a clear statement of how you intend to solve it.
- You will develop both sets of ideas in subsequent sections.

**Background**
- Background to the policy including policy framework, forces shaping discussion, and other efforts to address problem.

**Full statement of Policy Solution**
Full statement of Policy solution including the laws or regulations or treaties that would be needed to support the solution and the agencies that would be involved.

Summary
Roughly 400 word summary of problem and solution. It should give an honest assessment of the weaknesses of the policy or the work that needs to be done.

Argument
A section that makes the case that this solution is the best way to address the problem.

Bibliography
Works used and cited in paper. If you use works that you don’t cite, they are to go in a section entitled “Additional Reading” or something similar.

Grading Rubric
Clarity & Expression of text 20%
Is the paper readable and make its points logically?
Organization of paper 20%
Does it follow standard structure and does the argument make sense?
Research and Background 30%
Does paper include all the appropriate materials for the policy and argument?
Policy Construction 30%
Does proposed policy make sense within current policy environment?

NOTES ON READINGS:
This class makes extensive use of government and think tank reports. The quality of these reports varies widely. Some are carefully conceived and thorough studies of a problem. Many are fairly balanced position papers. They are promoting a specific idea but they do an honest job of considering alternatives. At least a few are lightly varnished advocacy presentations. They pushing a specific point of view and care little for any opposing point of view. This course does not endorse the point of view of any of its readings. If anything, it has the goal of making you a more critical reader and better able to detect a specific point of view.

CALENDAR
Recommended Book

Neal, Homer; Smith, Tobin, and McCormick, Jennifer; Beyond Sputnik, University of Michigan, 2008
Week 1: Introduction I: Governments and Information


Campbell-Kelly, Martin, “Not Only Microsoft,” *Business History Review; Spring* 2001; 75, 1; pg. 103 -145
Focus on Pages 103-128 and 144-145


Discussion:
Price, Michelle

Week 2: A little Theory


The Rise of Big Data: How It's Changing the Way We Think About the World


Week 3: Administrative Procedure, Interagency Process, & Contracts
Whittaker, Alan, etc, The Interagency Process, Annual Update 2011, pages 24-42.

Discussion


Week 4: Regulation - Roadmap

ITRS International Technology Roadmap for Semiconductors, 2011 Update, Overview. Pages (1-4)


Discussion
Clark and Tan, Taiwan’s Boxed in Economy, Korean Observer, 2012.

________, Taiwan after the Personal Computer, Economist, 2013.

Week 5: Regulation – Standards


Hurd, John and Issac, Jim, “IT Standardization,” International Journal of IT Standards & Standardization Research; Jan-Jun 2005; 3, 1; pg. 68


Krechmer, Ken, “Standardization and Innovation Policies in the Information Age,” International Journal of IT Standards & Standardization Research; Jul-Dec 2004; 2, 2; pg. 49


Discussion:

Extra:
RFC-2026 Internet Standards, 1996

Week 6: Procurement: - Research


2015 FYI R&D Budget, and Introduction, AAAS

2013 AAAS Sequestration Brief


Hourinan, AAAS Brief, Federal R&D Sequestration, 2013


Discussion
Information Technology Annual Report 2012-2013, Government of India.

Week 7: Procurement - Egoverment Services


________, PCAST report on BYOD.

Discussion:

Coleman, et al, New Democracies, new media, what is new?, 2009


Background:


________, Helps America Votes Act, 2002

________, Egovernance act of 2003

Weeks 8 & 9: Collective Action – Networks

________, Report To The President And Congress Designing A Digital Future: Federally Funded Research And Development In Networking And Informaation Technology, PCAST, 2013.


Geist, Michael, “Approaches to Preserving the Open Internet,” Presentation at FCC Workshop, April 28, 2010.


_______, Tier 1 ISPs, IDG White Paper, 2006.

Hass, Douglas, “The Network was never was neutral,” *Berkeley Technology Law Journal*, 2007

_______, China’s Social Networking Problem, Spectrum, 2011.

Background:


Cannon, The legacy of the federal communications commission’s computer inquires, Federal Communications Law Journal; Mar 2003; 55, 2; pg. 167

Week 10: Collective Action - Cybersecurity/Smartgrid

__________, Cybersecurity, a Crisis of Prioritization, Washington DC, 2005. Chapters 1 & 2 & 3,


__________, Cyberspace Policy review, 2010, PCAST.


Informing Strategies and Developing Options for U.S. Policy Committee on Deterring Cyberattacks; National Research Council 2010

Kostyk and Herkert, Societal Implications of the Emerging Smart Grid, CACM, 2012


Week 11: Procurement – Big Data & Medical Records


__________, Report To The President Realizing The Full Potential Of Health Information Technology To Improve Healthcare For Americans: The Path Forward, Pcast, 2010.

Castro, The Role of Information Technology in Medical Research, ITIF, 2009.
Troy, Health Information Technology: The Case for a Sound Federal Policy, Heritage, 2009

DeHaven, Subsidies for Electronic Medical Records Leads to Higher Medicare Bills, CATO, 2013


Discussion

Krakovsky, Indians Elephantine Effort, CACM, 2011.

Week 12: Collective Action - Workforce


_______, Networking and Information Technology Workforce Study: 2009, NITRD. Chapters 2 & 4

Discussion:

NASCOMM and Naitonal Skills Registry

______, White Paper On Hr’s Role In ‘Nurturing Innovation In Organizations’ Nascomm, 2013

Background:

Week 13: External Action – Intellectual Property Protections

The Economic Impact of Properly licenced software, BSA, 2013.


Discussion
Shadow Market, 2012 Software Piracy Study, BSA.

Week 14: External Action: Trade & WTO


Maskus, Regulatory Standards in the WTO Peterson Institute for International Economics January 2000


Background:

______, “Ministerial Declaration on Trade in Information Technology Products,” WTO, 1996.


Lipton, Bad Faith In Cyberspace: Grounding Domain Name Theory In Trademark, Property, And Restitution. Harvard Law review, 2010.


First Day of Final Exams: Final Draft Due

Fall 2014 Dates
Week 1: August 28
Week 2: September 4
Week 3: September 11 – Week 4: September 18
Week 5: September 25
Week 6: October 2
Week 7: October 9
Week 8: October 16
Week 9: October 23 – Week 10: October 30
Week 11: November 5 – Week 12: November 12
Week 13: November 19

Due: Prospectus

Due: Short Paper

Rescheduled because of CCF Meetings

Draft Paper Due

Rescheduled because of IEEE meetings

November  26 - University Holiday

Week 14: December 4
Final draft of final paper due: December 13

Class Policies

Blackboard: This course does not use the blackboard system. It uses the site itpolicy.dagrier.net.

Submissions: All work should be submitted as a Word (.doc or .docx file) from Microsoft Word 98 or later.

[NOTE: for other university policies on teaching, see http://www.gwu.edu/~academic/Teaching/main.htm]

[b] Academic Integrity

Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information. For the remainder of the code, see: http://www.gwu.edu/~ntegrity/code.html

[d] Support for Students Outside the Classroom

DISABILITY SUPPORT SERVICES (DSS)

Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: http://gwired.gwu.edu/dss/

UNIVERSITY COUNSELING CENTER (UCC) 202-994-5300

The University Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include:
- crisis and emergency mental health consultations
- confidential assessment, counseling services (individual and small group), and referrals
http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupport

[d] Security

In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.
Sample Prospectus

**Proposed Policy:** This policy we must support the development of innovative communities by funding long term internship in innovative areas such as Bangalore or Silicon Valley for city planners and technology managers.

**Background:**
So much innovation has come from tight-knit technology communities such as Seattle or Singapore but little has been done to truly transfer the experience of those communities to other areas. This policy proposes that the US government establishes a grant program for city and technology managers to have a long term internship in an innovative area and learn how research and industry work in that area.

**Locus of Policy:**
This policy would produce a new program that would be administered by the National Science Foundation.

**Organizational or Legal change:**
In theory this program might require an act of Congress but in could easily be done with an information understanding between The Chair of the Science & Technology Committee in the House and the Head of the NSF with a change in the budget.

**Support and Material for Policy:**
This policy will draw heavily from the ideas developed in the innovative communities and from work done at Brookings about 8 years ago.

**Sources:**


