

INTA 4803-AY1/8803-AY1: Global Politics of Technology

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Office hours: Tu: 1-2; Th: 2-3 and by appointment

Tuesdays & Thursdays: 3:05 – 4:25

Course Description:

The development and adoption of technological innovations are greatly influenced by the rules and regulations affecting their use. This course examines the economic and political dynamics that influence how regulations governing technology are adopted around the world. We focus on a broad range of technical areas -- including civil aviation; food safety; the Internet; and nuclear energy -- to explore how regulatory decisions are made and explain why different governments adopt different rules. These differences are illustrated by comparing the regulatory processes of the world's two largest markets and most influential regulators: the United States and the European Union. We also explore how their regulatory choices influence the rest of the world through emulation, coercion, and cooperation.

Learning Outcomes:

By the end of this course, students will be able to:

- *demonstrate the ability to describe the social, political, and economic forces that influence the global system;*
- *understand causal and determinant relationships between science and technology (S&T) and international affairs (Science, Technology and International Affairs); and*
- *interpret, analyze and explain developments in global technology governance.*

Required Texts:

Fischhoff, B. and Kadvany, J. (2011), *Risk: A Very Short Introduction*, Oxford University Press.

Vogel, D. (2012), *The Politics of Precaution: Regulating Health, Safety and Environmental Risks in Europe and the United States*, Princeton University Press.

Available electronically through the GT Library (GT electronic resource): HC110.C63

List of Graded Assignments:

| Assignment | Date due | Share of total |
|---|----------------------|----------------|
| Regulatory failure case presentation | 1/21 | 10 |
| WTO dispute case presentation | 2/11 | 10 |
| Mid-term | 2/18 | 20 |
| Issue case study | Relevant class | 15 |
| Issue case presentation | | 5 |
| Draft regulation | 4/8 | 10 |
| National regulation (group) | 4/14 by email to all | 10 |
| Contribution to the negotiation (group) | 4/22 | 10 |
| Class participation | continuous | 10 |

Students taking the course for graduate credit (**8803**) will in addition have to demonstrate leadership in the group exercises.

Late assignments will NOT be accepted, except for medical or personal emergencies upon verification.

Extra-credit assignments (50 points for a good faith effort)

Submit a reflective summary (500 words max) of an eligible event within a week of the event.

An edited version of the best summary will be used as the official summary.

Grades

| Grade | Points | Descriptors |
|-------|----------------|---|
| A | 20 19 18 | Exceptionally good performance demonstrating a superior understanding of the subject matter, a foundation of extensive knowledge, and a skillful use of concepts and/or materials. |
| B | 17 16 15 | Good performance demonstrating capacity to use the appropriate concepts, a good understanding of the subject matter, and an ability to handle the problems and materials encountered in the subject. |
| C | 14 13 12 | Adequate performance demonstrating an adequate understanding of the subject matter, an ability to handle relatively simple problems. |
| D | 11 10 9 | Minimally acceptable performance demonstrating at least partial familiarity with the subject matter and some capacity to deal with relatively simple problems, but also demonstrating deficiencies serious enough to make it inadvisable to proceed further in the field without additional work. |
| F | <8 | Did not demonstrate familiarity with the subject matter, nor the capacity to deal with simple problems in a manner recognizable to the consensus of mainstream academic practitioners within the field. |

Grade Change Policy

Simple computational or clerical errors should be brought to my attention immediately. Legitimate requests for grade changes are welcome and encouraged. You should, however, resist the temptation to file a frivolous request just hoping to “get lucky”. Approach a grade change request as if arguing a legal case: you should have strong and convincing arguments and evidence to support your request. Be aware that appeals to the practices of other professors generally do not constitute good argument or evidence. Note also that grade changes requests can result in re-grades both up or down (or left unchanged). That is, if the greater scrutiny demanded by a grade change request reveals your assignment to deserve a lower grade than previously awarded, then the lower grade may be assigned.

Attendance Policy

Attendance is mandatory as is reading before class.

ADAPTS

The professor will work with ADAPTS so that all students have an equal opportunity for success. For information on ADAPTS, see <http://www.adapts.gatech.edu/>

Honor Code Statement:

Plagiarizing is defined by Webster's as “to steal and pass off (the ideas or words of another) as one's own: use (another's production) without crediting the source.”

If caught plagiarizing, you will be dealt with according to the GT Academic Honor Code.

For more information see: <http://www.honor.gatech.edu/plugins/content/index.php?id=9>

Course overview

| | | |
|------|---|-------------------------------------|
| 1/7 | Introduction | |
| 1/9 | Risk, market failures and regulation | |
| 1/14 | Analyzing risk | |
| 1/16 | Managing risk | Regulatory failure case selection |
| 1/21 | Regulatory failures I: False negatives | Regulatory failure case study |
| 1/23 | Regulatory failures II: False positives | |
| 1/28 | The politics of regulation | |
| 1/30 | American approaches to risk regulation | |
| 2/4 | European approaches to risk regulation | |
| 2/6 | Regulatory conflict and diffusion I | WTO case selection |
| 2/11 | Regulatory conflict and diffusion II: WTO disputes | WTO case study |
| 2/13 | Regulatory diplomacy | |
| 2/18 | Mid-term and guidance on the issue case study and selection | |
| 2/20 | No class - individual meetings with instructor | |
| 2/25 | Issue A | |
| 2/27 | Issue B | |
| 3/4 | Issue C | |
| 3/6 | Issue D | |
| 3/11 | Issue E | |
| 3/13 | Issue F | |
| 3/18 | Spring Break | |
| 3/20 | Spring Break | |
| 3/25 | National regulation and negotiation guidance | |
| 3/27 | No class -- work on draft regulation (individual) | |
| 4/1 | No class - individual meetings with instructor | |
| 4/3 | No class-- work on draft regulation (individual) | |
| 4/8 | National regulation | Draft regulation |
| 4/10 | National regulation II | |
| 4/15 | Preparation for negotiation | National regulation (4/14 by email) |
| 4/17 | International negotiation I | |
| 4/22 | International negotiation II | |
| 4/24 | Reflection and review | |

Red denotes assignment for grade

Green denotes required, but not assessed, actions

Detailed course description

1/7 Introduction

This class will explore what participants know and think about technology, risk and regulation. It will also provide a substantive and administrative overview of the course.

1/9 Risk, market failures and regulation

This class will introduce what regulation is and identify the reasons why regulations are adopted. It introduces the concept of 'market failures'; identifies economic and social regulations; and presents the different forms regulations may take.

Reading

Risk – Chs 1&2

1/14 Analyzing risk

Once risks are identified it is necessary to establish how great they are – the hazard and the probability of hazard – and what causes them. This class introduces how risks are analyzed.

Reading

Risk –Ch 3

1/16 Managing risk

While the analysis of risk is a largely scientific endeavor, deciding what risks are acceptable or preferable and how they should be weighed against other considerations are more political decisions. This class introduces these considerations and two, somewhat caricatured, approaches to managing risk: 'sound science' and the 'precautionary principle'.

Regulatory failure case selection

Reading

Risk – Ch 4

1/21 Regulatory failures I: False negatives

Because regulatory decision making takes place under uncertainty and involves political tradeoffs, sometimes technologies that should be regulated are not ('false negatives'). This class examines some examples of such regulatory failures.

Regulatory failure case study

| | | | |
|--|------------------|----------------------------|------------------|
| Lead in petrol | EEA 2013: Ch.3 | Asbestos | EEA 2001: Ch. 5 |
| DDT (pesticide) | EEA 2013: Ch. 11 | PCBs (chemicals) | EEA 2001: Ch. 6 |
| Chernobyl/Fukushima (nuclear power) | EEA 2013: Ch. 18 | Halo carbons (ozone layer) | EEA 2001: Ch. 7 |
| | | BSE (Mad Cow disease) | EEA 2001: Ch. 15 |

1/23 Regulatory failures II: False positives

Sometimes regulatory decision error the side of excessive caution, which means that safe, valuable activities are precluded. Such 'false positive' regulatory failures are less visible than 'false negatives,'but can have significant negative consequences. This class examines false positives as a means of underlining the challenges of managing risk.

Reading

EEA 2013: Ch. 2

1/28 The politics of regulation

Because regulatory decisions restrict or prohibit some products or activities and sometimes encourage others, they have economic consequences for businesses. Citizens also perceive risks and may demand action creating political pressure for regulation. Regulations, therefore, are not always (or only) adopted for functional reasons. This class introduces the political pressures that bear on regulatory decision making.

Reading

Risk – 5, 7; *Politics* – 2

1/30 American approaches to risk regulation

The United States has a highly developed regulatory system that has evolved significantly over time. This class introduces the U.S. regulatory system.

Reading

Politics – pp. 217-37; pp. 252-65

2/4 European approaches to risk regulation

Since the late 1980s the European Union has emerged as the other influential regulator alongside the U.S., but it makes regulatory decisions in a very different way. This class introduces how the EU adopts risk regulations.

Reading

Politics – pp. 237-50; pp. 266-78

2/6 Regulatory conflict and diffusion I

Differences in how regulatory decisions are made can contribute to different rules. Differences in rules have implications for economic exchange. They can, therefore, be a source of tension between countries. In some circumstances other countries may adopt the regulations of others. This class introduces how different regulations interact and under what circumstances diffusion or conflict is more likely.

WTO dispute case selection

Reading

Politics – pp. 12-16; Ch. 9

2/11 Regulatory conflict and diffusion II: WTO disputes

Since the creation of the World Trade Organization in 1995 multilateral trade rules have imposed significant disciplines on national regulatory processes. The WTO also introduced a binding system for resolving disputes among members. As a consequence, governments sometimes seek to resolve regulatory differences through litigation before the WTO. This class examines the most prominent WTO disputes involving regulatory differences.

WTO dispute case studies

| | |
|-----------------------|--------------------------------|
| Reformulated gasoline | Asbestos |
| Hormone treated meat | Genetically modified organisms |
| Shrimp - Turtle | Tuna-Dolphin II |

2/13 Regulatory diplomacy

For a variety of reasons, rather than challenging each other's regulations states often choose to try to resolve or at least mitigate the adverse effects of the differences through diplomacy. This class introduces the different approaches to managing regulatory differences and the domestic and international politics associated with them. It does so with particular reference to the on-going Transatlantic Trade and Investment Partnership negotiations between the EU and U.S.

Reading

Nicolaidis (2000): 573-80. (t)

Young and Peterson (2014): 157-63; 167-76 (t)

2/18 Mid-term and guidance on the issue case study

International regulatory issues

The class will collectively select which of six regulatory issue areas we will examine in depth. The issue areas are selected for their real-world importance and because they illustrate key features of the global politics of technology discussed during the first portion of the course. All students must do the required reading for each class, but each class will be informed by a student presentation on a case study of a particular relevant regulation or regulatory interaction to be selected in consultation with the instructor.

| | |
|-----------------------------------|---|
| Food safety | <i>Politics</i> – pp. 43-73; 91-102. Young and Peterson (2014): 164-7 (t) |
| Agricultural biotechnology | Harmon, A., 'On Hawaii, a Lonely Quest for Fact: Debate on Genetically Modified Crops Entangles a Novice Politician,' <i>New York Times</i> , January 5, 2014, A1, A18-19. (w) <i>Politics</i> – pp. 73-91 |
| Chemicals | <i>Politics</i> – Ch. 5 |
| Pharmaceuticals | <i>Politics</i> – pp. 189-202 <i>The Economist</i> , 'Leader: Pharmaceutical Pricing: The New Drug War,' and 'The New Drug War: Hard Pills to Swallow,' January 4, 2014. (w) |
| Aviation | EASA (2011), 'Information Note Agreement between the United States of America and the European Union on cooperation in the regulation of civil Aviation Safety' (t) "Making an ICAO Standard" http://legacy.icao.int/icao/en/anb/mais/index.html |
| Automobiles | <i>Politics</i> – pp. 105-20 UN/ECE World Forum for Harmonization of Vehicle Regulations (WP.29) How It Works How to Join It. 3 rd edition, 2012, pp. 1-28. Available at: http://www.unece.org/fileadmin/DAM/trans/main/wp29/wp29wgs/wp29gen/wp29pub/WP29_Blue_Book_2012_ENG.pdf |
| The internet and privacy | Drezner, D. (2007), <i>All Politics is Global: Explaining International Regulatory Regimes</i> , Princeton University Press, pp. 91-118. (t) Schwartz, P. M. (2013), 'The EU-U.S. Privacy Collision: A Turn to Institutions and Procedures,' <i>Harvard Law Review</i> , 126, 1871-9. Available at: http://www.harvardlawreview.org/media/pdf/vol126_schwartz.pdf (w) President's Review Group on Intelligence and Communications Technologies, 'Liberty and Security in a Changing World,' 12 December 2013, Preface (pp.10-13) and Executive Summary (pp. 14-23). Available at: http://www.whitehouse.gov/sites/default/files/docs/2013-12-12_rg_final_report.pdf (w) |

2/20 No class – individual meetings with instructor

2/25 Issue A

2/27 Issue B

3/4 Issue C

3/6 Issue D

3/11 Issue E

3/13 Issue F

3/18 Spring Break

3/20 Spring Break

3/25 National regulation and negotiation guidance

This class will discuss what is expected in terms of agreeing ‘national’ regulations and participating in the negotiations. It will also introduce some tips and tactics for negotiations.

Reading

Conflict Research Consortium’s summary of Roger Fisher and William Ury, *Getting to Yes:*

Negotiating Agreement Without Giving In, (New York: Penguin Books, 1983). Available at:

<http://www.colorado.edu/conflict/peace/example/fish7513.htm>(w)

3/27 No class -- work on draft regulation (individual)

4/1 No class – individual meetings with instructor

4/3 No class -- work on draft regulation (individual)

4/8 National regulation I

During the class the instructor will meet with teams individually to discuss their progress and suggest ways forward.

Draft regulation due

4/10 National regulation II

During the class teams will meet separately to finalize their polity position papers. The instructor will be available for consultation as required.

National regulation due to all by email by 5 p.m. 4/14

4/15 Preparation for negotiation

During this class teams will meet separately to decide how to go about presenting their position in the negotiations. The instructor will be available for consultation as required.

4/17 International negotiation I

Start negotiations address regulatory differences.

4/22 International negotiation II

Conclude negotiations address regulatory differences (if necessary).

4/24 Reflection and review

This class will provide an opportunity to reflect on the process and outcome of the negotiations in the context of the course as a whole.