INTA 4050/8803 -- International Affairs & Technology Policy
3.0 Credits
Fall 2013
Monday, Wednesday, and Friday, 12:05pm – 12:55pm
Love Manufacturing Building (MRDC II), Room 184

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316 Habersham, 404-385-1494
Office Hours: Monday 1pm – 2:30pm or by appointment

Course Description:
Science and technology are essential to almost every aspect of life, and to the government. However, the ways in which the government acts as a developer/ supporter as well as a consumer of science and technology have varied significantly across time and also vary across different fields. In this course, we will examine the relation between science and technology, public policy, and international affairs. The first half of the course focuses on governments as supporters of science and technology in historical perspective - why are governments involved in science and technology issues, and what form does this involvement take? In the second half of the course, we will look at governments as consumers of science and technology, examining a number of policy areas in which science and technology are crucial for informed decision-making.

Course Objectives:
By the end of this course, students should be able to:

- Explain why the U.S. government originally invested in science and technology, and why it continues to do so today
- Analyze whether federal or state scientific and technical investments are consistent with stated policy goals
- Recognize public policy challenges in which science and technology play a major role
- Identify both the scientific and policy components of an issue as well as how these issues interconnect during policy-making
- Understand some of the primary challenges in international science and technology policy

Required Readings:
Books
Muller, R. *Physics and Technology for Future Presidents: An Introduction to the Essential Physics Every World Leader Needs to Know*. Princeton, NJ: Princeton UP, 2010. Print.

Additional readings will be listed below the class for which they should be read. These readings will be available online.

Grade Distribution:

15% Class Participation (not just attendance!)

Every class will include a discussion period focused on the readings and lecture material. The value of these discussions is entirely dependent on the preparation and engagement of the students in the class. To get full credit for class participation, you must, on a consistent basis, attend class, be prepared for discussion, and engage fully with your classmates.

35% One-page Reading Responses (7 worth 5% each)

There will be short readings assigned for each week, available on the detailed class schedule document. These readings will be accompanied by a question, which we will discuss in class. Over the course of the semester, you should choose seven of these questions and write a one-page (250-500 word) response to each. You can choose any seven questions you wish (first seven weeks, last seven weeks, or dispersed throughout based on your interest). If you complete more than seven reading responses, I will use the seven that received the highest grades. The one-page response is due at the beginning of class on Monday for the week to which it corresponds. It should be sent to me via email with the subject: INTA 4050 – Reading Response Week # – FirstName LastName.

20% Midterm Paper – Due Monday, Sept. 30 at 12:05pm

Three topics/ questions will be provided to you two weeks before the midterm paper is due. Please choose one of the three topics as the focus of your midterm paper. This paper should be 5-7 pages (1250-1750 words), and can be answered based on readings assigned for class (though outside sources may also be used, if desired).

30% Final Paper (20%) and Policy Memo (10%) – Due Friday, Dec. 6 at 12:05pm

The final paper should be approximately 10 pages (2500 words), written on policy issue of your choice for which science and technology play a central role. The issue should also have relevance for international affairs. You can choose from the topics that we cover in lecture, but you are not restricted to these topics. In your paper, you should identify the policy problem you will address and describe the current state policy regarding this problem. Include a section on the relevance of science and technology to this problem and its implications for international affairs. Provide your analysis of how well information about science and technology has been integrated into the policy-making process for this problem. Finally, provide recommendations on how to proceed forward to address this issue.

In addition to the final paper, you should write a 1-page (250-500 word) policy memo summarizing the most important findings from your paper. Assume you are writing the memo to a high-level government official that is familiar with science and technology policy in general, but not the specifics of the issue you've chosen. Include relevant background on the issue as well as your recommendations for policy action. You will have an opportunity to turn in a draft copy of the policy memo in advance to receive feedback from me. This feedback can help to improve both the memo itself as well as the final paper.

Graduate students will be graded on the same scale, but the paper midterm and final paper lengths should be (approximately) doubled. The reading responses and policy memo should remain at one page.

Class Schedule:

PART ONE: Policy for Science and Technology: Government as a Supporter of Science

Week 1: Aug. 19, 21, 23 - Science and Technology Policy Today
Week 2: Aug. 26, 28, 30 - Government and Science Before and During WWII
*No class meeting Aug. 30th (At-home Assignment)
Week 3: Sept. 4, 6 - Government and Science Post WWII
*No class meeting Sept. 2nd (Labor Day)
Week 4: Sept. 9, 11, 13 - Sputnik and the Space Race
Week 5: Sept. 16, 18 - National Innovation Systems
Week 6: Sept. 23, 25, 27 - Science and People

PART 2: Science and Technology for Policy: Government as a Consumer of Science

Week 7: Sept. 30, Oct. 2, 4 - Nuclear Weapons
*Midterm Paper Due Monday, Sept. 30th
Week 8: Oct. 7, 9, 11 - Energy
Week 9: Oct. 14, 16, 18 – Weather
*No class meeting Oct. 14th (Fall Recess)
Week 10: Oct. 21, 23, 25 - Climate
Week 11: Oct. 28, 30, Nov 1 – Space
Week 12: Nov. 4, 6, 8 - International Development
Week 13: Nov. 11, 13, 15 - Cyber Security
Week 14: Nov. 18, 20, 22 - Biotechnology
Week 15: Nov. 25, 27 - Science of Science Policy
*No class meeting Nov. 29th (Thanksgiving)
Week 16: Dec. 2, 4, 6 - Class Discussions
*Final paper due Fri., Dec. 6th

Course readings and reading response questions for each week will be posted on T-Square at least one week prior to the date they are due.

Any changes or updates to the course schedule will be announced in class and on T-square.