**INTA 4803/8803 – Space Policy**
3.0 Credits
Spring 2014
Monday, Wednesday, and Friday, 3:05pm – 3:55pm
Instructional Center 107

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Office Hours: Monday 12:30pm – 2:30pm or by appointment

**Course Description:**
Space technologies permeate many aspects of our lives, from the GPS applications in our phones to satellite remote sensing that underlies international security verification. We hear about experiments in the International Space Station or see images taken by the Hubble Space Telescope. But how do policy-makers decide what new space missions to fund, where to focus exploration, and what industry developments to encourage or allow, and what do they plan to do next?

In this course, we will examine a range of current international space policy issues, including civil, military, and commercial activities. We will look at the origins and evolution of space policy over time and examine its strategic role in international affairs. The course will introduce students to a range of current challenges and debates in space policy, such as current international human exploration strategies, technical and political problems and potential solutions related to space debris, efforts at international cooperation in satellite Earth observations, and recent developments and possibilities in the commercial space launch sector. This course will expose students to the debates and decisions that have shaped global space activities and the policy issues that must be addressed to meet future goals.

**Course Objectives:**
- Student will demonstrate the ability to describe the social, political, and economic forces that influence social behavior.
- Student will demonstrate the ability to describe the social, political, and economic forces that influence the global system
- Students will understand causal and determinant relationships between science and technology (S&T) and international affairs across different topic areas
- Students will be able to express their arguments clearly and effectively both in written reports and in their research and oral presentations.
- Students will be able to identify a variety of space policy issues and develop arguments for and against particular policy options
- Students will demonstrate the ability to analyze a space policy issue in depth

**Course Texts:**
*Burrows, William E. This New Ocean: The Story of the First Space Age. New York: Modern Library, 1999*

Additional readings (available online) will be listed on T-Square at least one week in advance of the class for which they should be read.

**Grade Distribution:**

***14% Class Participation (not just attendance!)***

This course will include discussion on a regular basis, drawing upon 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.

***36% Weekly One-Page Written Assignments (12 worth 3% each)***

There will be one-page (250-500 words) written assignments due on Friday before class each week requiring you to analyze a specific issue, based on the readings provided. The writing prompt will be provided at least one week in advance. Each response should be sent to me via email with the subject: [INTA 4803] Reading Response Week #X – FirstName LastName.

***20% Midterm Paper – Due Monday, March 3, at 3:05pm***

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) [Length requirement is doubled for graduate students], and can be answered based on readings assigned for class (though outside sources may also be used, if desired). The midterm should be sent to me via email with the subject: [INTA 4803] Midterm – FirstName LastName.

***30% Final Paper (20%) and Policy Memo (10%) – Due Friday, April 25 at 3:05pm***

The final paper should be approximately 10 pages (2500 words) [Length requirement is doubled for graduate students], written on a space policy issue of your choice. You can choose from the topics that we cover in lecture, but you are not restricted to these topics. The paper should identify the policy issue you have chosen and describe the current state of affairs with regard to the issue, including its relevance to international affairs. It should describe the key policy goals, stakeholders, and technical or political challenges involved. The paper should identify and analyze existing policy proposals and analyze each with regard to the goals and challenges identified. The paper should conclude with concrete policy recommendations.

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 not familiar with 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.

The final and policy memo should be sent to me via email with the subject: [INTA 4803] Final – FirstName LastName.

**Class Schedule:**

| Week | Dates | Topic | Assignments |
|---|---|---|---|
| 1 | Jan. 6, 8, 10 | Space Policy Today | |
| 2 | Jan. 13, 15, 17 | Space Launch Industry | Response 1 Due |
| 3 | Jan. 20, 22, 24 | Commercial Cargo and Crew<br>*No Class Mon., Jan. 20: MLK, Jr. Day* | Response 2 Due |
| 4 | Jan. 27, 29, 31 | The Space Race: Human Space Exploration | Response 3 Due |
| 5 | Feb. 3, 5, 7 | Future of Human Space Exploration | Response 4 Due |
| 6 | Feb. 10, 12, 14 | Space Situational Awareness | Response 5 Due |
| 7 | Feb. 17, 19, 21 | Space Code of Conduct | Response 6 Due<br>Midterm Assigned |
| 8 | Feb. 24, 26, 28 | Earth Science Satellites | Response 7 Due |
| 9 | Mar. 3, 5, 7 | Earth Science Data Sharing | Response 8 Due<br>Midterm Paper Due |
| 10 | Mar. 10, 12, 14 | Weather Satellites | Response 9 Due |
| 11 | Mar. 17, 19, 21 | *No Class: Spring Break* | |
| 12 | Mar. 24, 26, 28 | Global Navigation Position and Timing Satellites (debate on Galileo) | Response 10 Due |
| 13 | Mar. 31, Apr. 2, 4 | Communication Satellites (debate on broadband satellite, O3B) | Response 11 Due |
| 14 | Apr. 7, 9, 11 | Space Science | Response 12 Due |
| 15 | Apr. 14, 16, 18 | Choosing Planetary Science Missions | Response 13 Due |
| 16 | Apr. 21, 23, 25 | Presentations and Discussion | Final Paper Due |