

JOUR/STS 124  
**POLITICS OF SCIENCE**  
Fall 2007 4 Credits

SCOPE OF THE COURSE

Interactions between the science community and the federal government are numerous and often symbiotic. On one hand, most scientific research of any size is supported by federal dollars. On the other hand, the federal government frequently turns to scientists for their expertise and advice on numerous issues. Scientific advice often is the basis for federal regulations for foods, drugs and pollutants. The relationship between science and the government is not simple: it is affected by various factors including the state of scientific development, public opinion and political and budgetary constraints. Often, the relationship between science and government reflects that between science and society.

This course is designed to examine some of the multi-dimensional interactions between science, government and society. It will start by exploring the historical growth of the science-government connection as well as connections with other organizations such as universities and industry. In particular, we will look at some of the interconnections between science and technology and national and homeland security. We also will look at the scientific establishment as it has existed and is structured today.

Toward mid-semester, the role of Presidential science advice and interactions of the scientific community with the White House and Congress will be analyzed. Shifting from a government to a more societal focus, the course then will look at scientific misconduct and ethics, and public attitudes toward science. Finally, we will read a case study about a scientist and her research on an important environmental health threat and how many of the factors we have discussed during the semester came to affect both the scientist and her research. A tentative course outline is at the end of this syllabus.

CLASS PARTICIPATION

This is primarily a discussion class with some lectures, and you will be expected to **actively participate**. Your participation in class discussion will be an important part of your grade and I will be keeping track of your participation record. Also important is your class attendance. **More than three unexcused absences will lower your final grade one full letter grade. Additional absences will lower your final grade even more.** Since late arrivals disrupt discussion, two late arrivals will count as an absence. Leaving and returning to the classroom during discussions also is disruptive. If you do so, it will count as a late arrival. So come to class prepared to stay the full time and come on time.

## READINGS

Selections from three books are required for class readings. The books are available in the Lehigh bookstore. There will be a significant number of readings both from books and articles from Internet sites and these are linked for you on the Course Documents section on the class Blackboard site. When they are due is noted on the course schedule. The Blackboard site also is for students to place assignment outlines or to use for group work. A reading schedule with approximate dates is at the end of the syllabus and is listed separately under Course Information on Blackboard. The books you need to buy are:

*Science Policy and Politics*, Alexander J. Morin  
*On Being a Scientist*, 2<sup>nd</sup> edition, the National Academy of Sciences  
*And the Waters Turned to Blood*, Rodney Barker

## ASSIGNMENTS & EXAMS

### **1. Discussion Leader Role:**

Every student will serve as a discussion leader (DL) for 1-3 assigned readings. The DL will conduct the class for all or part of that period and turn material into me for grading. Students will place their DL outlines for the class' use on Blackboard under the appropriate section of the Discussion Board. Grades will be given separately for 1) the summary of the material and the quality of the questions developed on the reading and 2) the class discussion that follows from those questions. More information on how to prepare to be a DL and a sample outline is on Blackboard under Assignments.

For each class, everyone who is not a DL is expected to 1) read the assigned material and, 2) unless there is another assignment for students, develop one question about the reading to ask the class if called on, which will be turned in. You should plan to participate vigorously in discussions led by your classmates and will be graded accordingly. I will call on students for assignments, comments and questions randomly.

### **2. Written Papers and Web Searches**

Students will write three brief papers: 1) a report about a scientific society; 2) an assignment on science in the media, and 3) a paper on public portrayals of scientists and engineers. The first paper will entail finding out about the goals and programs of a specific scientific society, writing up a 4-6 page report about it and sharing that information with the class. The second paper will track a science policy topic in the media and then suggest how to follow up on the topic for a new article (1-2 pages). The third paper on public perceptions (4-5 pages) will be an individual review of how scientists and engineers are presented in popular culture. You also will conduct several searches of the World Wide Web for class information and turn in your results for grading. Please print all assignments **double-spaced and one-third down the first page**. More information on these papers is on Blackboard under Assignments.

### **3. Exams**

There will be a midterm and either a regular final or take-home exam.

## GRADES

### **1. Grades will be calculated as follows:**

Classroom discussion and participation: 20%

Discussion Leader assignment(s): 15 %

Written assignments: 20%

Midterm: 20%

Final exam: 25%

**All assignments must be turned in to pass the course.** Grades for late papers (including DL assignments) will be lowered: the later the paper, the more the grade will be reduced. Individuals who are not in class to serve as DLs on their assigned day will flunk the class discussion part of that grade. There is no makeup. However, these students still will be responsible for turning in the written part of the assignment to me for the other part of the grade.

### **2. Academic Integrity**

To plagiarize is to present another person's writings and ideas as one's own without acknowledging the original source. Students should document any and all sources used in research, even if taken from a website. As a rule of thumb, four or more words in sequence and unaltered from an original source require citation. For useful citation guidelines, see: <http://www.lehigh.edu/library/guides/PlagiarismStudent.html>.

### **3. Accommodations for Students with Disabilities**

If you have a disability for which you are or may be requesting accommodations, please contact me and the Office of Academic Support Services, University Center 212 (610-758-4152) as early as possible in the semester. You must have documentation from the Academic Support Services office before accommodations can be granted.

## THE INSTRUCTOR

I am Sharon M. Friedman, Professor of Journalism and Director of Lehigh's Science and Environmental Writing Program as well as Associate Dean of the College of Arts and Sciences. Before joining Lehigh's faculty, I wrote about the politics of science in Washington, DC.

My office hours are Tuesday-Thursday, 9:00-10:30 a.m. in Room 209 in Coppee Hall. Tuesday and Thursday afternoons and on Monday and Friday, I will be in 213 Maginnes Hall, but I am often at meetings elsewhere. I work off campus on Wednesday. If you want to meet with me and can't make the regular office hours, please make an appointment. My primary office telephone is 610-758-3303 (Maginnes); secondary phone is 610-758-4179 (Coppee); e-mail address is [smf6@lehigh.edu](mailto:smf6@lehigh.edu). I read e-mail every day except Saturday, so to reach me quickly, send e-mail. I would like to hear your comments and questions, so contact me.