

HON 230
DRUGS: FROM DISCOVERY TO MARKET
FALL 2010
12:30-1:45 TU

INSTRUCTOR:

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Office hours 9-11 MW
10-11 F

TEXT:

Fran Hawthorne, *Inside the FDA: The Business and Politics Behind the Drugs We Take and the Food We Eat*. John Wiley and Sons (2005).

FORMAT AND COURSE GOALS:

This course has been taught for several years as an on-line course, primarily for the Liberal Studies program. I have been asked by the Honors Department to offer it this semester as a face-to-face course for the Honors program. The course will look at drugs, the pharmaceutical industry (Big Pharma) and the role of the FDA. We will begin with a look at drugs as chemicals, plus a history of drugs as natural products that have been used for hundreds of years. We will then examine what our bodies do to drugs, and what drugs do to our bodies. Next we will look at some of the most widely prescribed drugs by target, and take a look at some pharmacy law. The heart of the course will examine the discovery of lead compounds in a pharmaceutical or biotechnology company that might become a drug after about 10 years and 800 million dollars. That process will be followed from the lab discovery through preclinical and animal testing and into human clinical trials. Though the FDA is involved in all of these steps, we will take a look at the history of the FDA and regulations that have been put in place regarding safety and efficacy, look at drug recalls by the FDA, and examine how drugs are advertised and marketed by the industry. We will then follow up with a number of important topics including orphan diseases, diseases in the developing world, the future of drugs, and dietary supplements.

The course will involve some lecture and in-class discussion. But you will also assist in the instruction as you will be assigned to a group of 5 students and each group will give two half-hour presentations throughout the semester on topics of interest to society in general. Groups will be assigned after the first week of class, and presentations will begin on Thursday, September 30 and continue every Thursday throughout the semester. Topics will be given 2-3 weeks prior to your presentation.

ASSESSMENT:

Research papers	
Assigned Drug	10%
Assigned Drug Company	10%
Miscellaneous Short Assignments	15%
Midterm Exam	20%
(tentative date 10/26)	
Final Exam (non-cumulative)	20%
Group Presentations	25%

OUTLINE:

Weeks 1,2	Introduction to Drugs Introduction to Chemistry Drugs Throughout History
Weeks 3,4	Basic Pharmacology Neurotransmitters Receptor Theory- How Drugs Work
Weeks 5,6	Drugs by Class, Target Antibiotics; Viral and Bacterial Diseases Pharmacy Law
Weeks 7-10	Drug Discovery Pre Clinical Testing Clinical Trials; Institutional Review Boards
Weeks 11,12	FDA Approval Process Type I, II Errors Marketing and Advertising
Weeks 13,14	Special Topics