COURSE ORGANIZATION

The course will be divided into two sections. First half will be focused on the scientific aspects of drug structures, functions and modes of action. The second half of the course will focus on social issues related to drugs and drug use.

First Half:
In this portion of the course each student will be assigned to a class group and will work with the group, using guided inquiry activities (See CLASSROOM ACTIVITIES below), to develop an understanding what drugs are, why we use them and how they work. The part of the course will culminate with a mid-term exam.

Second Half:
In this portion of the course your group will present a class on a socially important issue related to drugs (See GROUP PROJECTS below). Also, each student will prepare a position paper on controversial social issue (See POSITION PAPERS below) and makes a 15 minute presentation to the class summarizing their findings and position on the issue. The position papers will be due on the last day of classes and there will be no final exam.

COURSE GOALS

Upon completing this course students will be able to:
• Explain the mechanisms by which various types of drugs act to affect health and behavior of humans.
• Search the science and social science literature to find references that inform and support their understanding of the effects of drugs on society.
• Analyze both social and natural science aspects of drug use or abuse and explain the results of their analyses both verbally and in writing.

SCHEDULE OF TOPICS

With approximate dates

Aug. 27 & 29: What is a drug and why do we use drugs?
(Liska CH 1.)

Aug. 31 & Sept. 5: How are drugs classified?
(Liska 1.8, 1.10-1.12, 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1, 13.1, 14.1)

Sept. 7 – Sept. 21: How do drugs work? Part 1
(Liska CH 4 & 5 & 6.6-6.10)

Sept 24: Library Search Orientation – Reeves Library

(Liska CH 7.2, 7.8, 8.3, 9.4, 10.3, 10.6, 13.2)

Oct. 26: Why is access to some drugs controlled by law?
(Liska CH 3)

Oct. 29 – Nov. 7: Groups project presentations.

Nov 9: General Discussion of Group Projects

Nov 12 – Dec 7: Position paper presentations.

Dec 10: General Summary Discussion, Course Evaluations and Position Paper Submission.
REQUIRED TEXT


CLASSROOM ACTIVITIES

**Groups and Student Collaboration:**
To aid you in developing an understanding of course material, each of you have been assigned to a **class discussion group.** Each group consists of three or four students. Groups have been set up to maximize the diversity of student backgrounds. We will be exploring both scientific and social aspects of the effects of drugs on people and society, so having diverse points of view should help groups progress efficiently through the variety of activities and projects. I hope that you will find that working with the members of your group will give you better insight in your analyses of the daily assignments and your group project.

**Class Format:**
This course employs a discussion format that is unconventional for science courses but may be more familiar to students with majors in the social sciences and humanities. The _value of class periods is largely dependent upon what each student contributes._ During the first half of the course, for each class you will be given an activity with some data, diagrams, graphs or text and some questions to guide your analysis in preparation for the class. It is best to work with your group mate to prepare for class. When you come to class, all groups will have a few minutes to get organized and then three or four groups will be randomly selected to present their analyses of some aspect of the assignment. Generally, these analyses will be requested before there has been any discussion of the assignment. Consequently, you will be asked to draw initial conclusions from your analyses of the material provided in the activity and present them as a starting point for class discussion. After the initial group presentations, we will have a 5 to 10 minute group discussion period for all groups to develop responses to the initial presentations. Then a few additional groups will be selected to respond to the original groups' analyses, and additional individual volunteer responses will be considered in an effort to reach consensus on the best analysis of the issue under consideration. When the first issue is settled, we will move on to the next consideration gradually building our understanding of drugs, their uses and effects on society. This process may be a bit uncomfortable for some of you at first, since you will have to rely on your own logic rather than something you have gotten from a lecture or textbook. However, as the semester progresses, you will develop a "sense" of the material and your confidence will increase making you more comfortable with presenting your ideas.

EVALUATION

**Grades:**
All grades will be determined on an absolute letter grade scale, so there is no disadvantage to any student for helping another. In fact, often students develop a much better understanding of the concepts and material in the course by dealing with the difficulties and viewpoints of other students. Student collaboration is an important basis for the design of this course. The various activities and requirement for the course will contribute to your overall grade according to the following proportions:

- Individual participation in class discussions of student presentations: 15%
- In-Class Group Work: 20%
- Group Project: 20%
- Mid-term Exam [Oct. 24]: 20%
- Position Paper [Due Dec. 10]: 25%

**TOTAL**: 100%

**Mid-term Exam**
The exam will be an in-class closed-book exam on Wednesday, October 24. It will consist of some specific "simpler" questions, and 2 to 4 "more complex" questions, which will require you to apply concepts developed in class to new situations. However, one week prior to the exam (Wednesday, October 17) a packet with some "simpler" questions, and 5 or 6 specific "more complex" questions
will be distributed. The "simpler" questions will be representative of the type of "simpler" questions that are likely to be on the exam. However, the "more complex" questions on the exam will be taken verbatim from the packet distributed. You will then have one week to work alone, with your group members, or anyone else in the class to devise answers to the questions. During your deliberations, you may ask me questions, but you are not allowed to consult anyone not involved in the course this semester. The exam will be written in class on Wednesday, October 24. You may bring a calculator and writing implements to the exam, but NO notes, books, handouts, cell phones or electronic material may be used and there will be NO consultation or collaboration among students during the exam. Thus, you can work together in analyzing the questions, but the final copy of your exam should express your own understanding of the material.

GROUP PROJECTS

Topics
The CHEM–IDIS 294 Group Projects are designed to give each of you an opportunity to work with a team to explore a socially important issue related to drugs. This issue involve problems related to drug abuse and treatment, but could also focus on positive or negative aspects of the development or use of therapeutic drugs or the political aspects of drug laws and their effect on society. A list of some possible issues is provided below, but I suggest that you get together as a group and decide on an issue that is particularly interesting to you. Any issue that relates drugs to society as a whole is potentially acceptable. Most of the suggested issues below are too broad to be dealt with in the time available for your project. So your group should focus on a specific aspect of the issue that is tractable for your group project. We can discuss appropriateness of the scope of an issue as you select your project topic.

Structure and Requirements
Each group is to explore its topic from appropriate literature references. Depending on the topic, references will vary. Some references may be from sources such as newspaper articles, government or non-profit organization reports or websites, but at least two must come from academic social science journals or reference volumes and one from an academic science journal or reference volume. The goal of the project is for each group to conduct one 50 minute class period in which the group members collaborate to present the major aspects of their issue and lead a class discussion. The format of the presentation and discussion is determined by the group; however, to facilitate the class discussion, each group will provide the class members with at least four discussion questions and one reading assignment (5 to 10 pages) two class periods before the group presentation. On the day of the presentation, the group will submit to me an annotated bibliography of the literature used for the presentation. Finally, to assure that all group members get appropriate credit for their contributions to the project, on the class day following the presentation, each member of the group will submit a two page outline of her/his work on the project. This outline must include any references explored.

Timeline for group Projects:
Thursday, August 30:
by 7:00 PM
Submit a group name to me by e-mail. Also include names of all group members.

Friday, September 7:
at the beginning of class
Submit a Group Project topic with a one paragraph description of the issue and a one paragraph explanation of the group’s interest in the topic.

Friday, September 14:
A sign up sheet will be posted outside 213 Collier at 8:45AM.
Choose a Group Project presentation date.

Two class periods before the presentation date:
at the beginning of class
Distribute and a reading assignment.

Presentation Date:
Submit the annotated bibliography and conduct the class.

The class period following presentation date:
Submit outlines of individual participation in the project.
Sample Group Project Topics
The following list provides potential group project topics. Groups may choose one of these, but are encouraged to explore other social issues of particular interest to them and submit their own ideas for approval.

- Ethical standards and the marketing of prescription drugs
- How prescription drugs are altering American lives, minds, and/or bodies
- Drugs and sports
- The relationship between the pharmaceutical industry and treatment for depression
- Cost vs. benefit of drug development
- Drugs as potential weapons
- Effects of drug company efforts on doctors’ patterns of prescriptions
- Controlling the cost of medical care
- The problem of drug resistant bacteria
- Drug availability for all
- Seasonal and pandemic influenza preparedness
- Generic vs. brand name drugs

POSITION PAPER (Structure adapted from SOC/IDIS 256 - D. Wetcher-Hendricks)
To provide each of you with an individual in-depth involvement with the effects of drugs, drug use and the need for drugs in our society, you will prepare a position paper on a controversial issue concerning drugs and society. This issue may be related to the one used in your group project or be unrelated to it, but it needs to be uniquely yours and not shared with another member of the class. Your position paper will be due by 5:00 PM on the last day of classes and will replace the final exam for this course. You will also give the class a 15 min. presentation outlining your issue, the arguments on both sides of it and providing your reasons for supporting your position on the issue.

Structure of the Paper
Introduction: Establishes the issue and explains the importance of addressing it.

Body: Provides the context of the issue including a summary of its history or background, a description of the competing positions on the issue with a concise statement of the supporting arguments for each, and presents your position on the issue with your supporting arguments. This discussion should consider the major points favoring each side and provide references and arguments dealing with the strengths and weaknesses of each. References must be properly cited using either MLA or APA style. Your analysis of the competing arguments should provide a basis for a more detailed analysis that presents and justifies your opinion on the issue. It is important to show that you recognize the best arguments for the position opposing yours and to present the counter arguments that led you to reject that opinion as well as presenting materials that support your opinion.

Conclusion: Reviews your primary arguments and brings them together in a way that leaves the reader convinced of the primacy of your position.

References: Support for your statements and analysis must include references from at least three academic social science journals or reference volumes as well as one academic science journal or reference volume. Other references may be from sources such as newspaper articles, government or non-profit organization reports or websites, etc.

Length: 8-10 word-processed pages excluding the title page and works cited page (12 pt Time New Roman with 1 in. margins: top, bottom, left and right).

Format: The paper should have a title page (See template to the right) and page headers with your name and page numbers. The title page should not be numbered, so that the first text page is page number one. (Consult with me if you are unfamiliar with how to accomplish this format with your word processing software.)
Paper Presentation

You will have 15 minutes of class time to summarize your issue, the arguments on both sides of it and provide your reasons for supporting your position on the issue. There will then be approximately 5 minutes for questions from the class and general discussion of the issue. Two presentations will be scheduled per class.

Timeline for Position Papers:

Friday, September 28: Submit an issue for your position paper with a one paragraph description of the issue and a one paragraph explanation of your interest in the issue.

Friday, October 5: Choose a Position Paper presentation date.

A sign up sheet will be posted outside 213 Collier at 8:45AM.

Presentation Date: Present the outline of your position paper.

December 10: Submit the final draft of your position paper.

By 5:00 PM

Sample Issues for Position Papers

The following list provides potential issues that might be used for a position paper. You may choose one of these, but you are encouraged to explore other controversial issues of particular interest to you.

- Should marijuana be a controlled substance?
- Is Drug Treatment Court an effective approach for dealing with drug abusers?
- Should the federal government provide support for development of “orphan drugs”?
- Should vaccinations for human papillomavirus (HPV) be required for all girls?
- Should “natural” dietary supplements be controlled by the federal government?
- Should there be one national health insurance plan to cover everyone living in the US?
- Should drug companies be allowed to advertise directly to consumers?
- Are psychiatric drugs a panacea or a problem?
- Should pharmacists be allowed to refuse to dispense medications based on their personal values?
- Should women be able to obtain a prescription for emergency contraceptive measures in advance from their physicians as a precautionary measure?
- Should the “morning after pill” become an over-the-counter drug?
- Do we have a sufficient plan to supply vaccines for periodic or pandemic viral outbreaks?
- Do hospitals make a significant contribution to the spread of communicable diseases?
- Does the relatively low involvement of women, minorities and/or children in clinical drug trials create a problem for doctors in choosing proper doses of prescription drugs for these populations?
- Are school-based drug prevention programs effective?
- Are drugs over prescribed for control of behavioral problems?
- Are drug rehabilitation centers nothing more than ways to avoid prosecution?
- Are we winning “The War on Drugs”?
- Should the federal government be required to negotiate drug prices with pharmaceutical companies?

COLLABORATION AND ACADEMIC HONESTY

Collaboration among students in class and in preparation for class discussion is generally encouraged and required for most parts of the course. Educational research indicates that students learn best when they engage in discussions and analyses of class material with their peers. However, the final version of all written work submitted for evaluation must be prepared without consultation with other students. To be fair to all students in the course and to assure maximum learning for each student, we follow all the guidelines for academic honesty spelled out in the Moravian College Student Handbook 2006-2007 (pages 26-28). Particularly relevant passages are excerpted below.
Academic Honesty at Moravian College

Academic integrity is the foundation on which learning at Moravian College is built. Moravian College expects its students to perform their academic work honestly and fairly. In addition, a Moravian student should neither hinder nor unfairly assist the efforts of other students to complete their work successfully. The College’s expectations and the consequences of failure to meet those expectations are outlined below.

In an academic community, students are encouraged to help one another learn. In fact, because no two students learn in exactly the same way or take exactly the same things away from a lecture, the College encourages students to study together. The boundaries on what is or is not acceptable work may not always be clear; thus, if at any point in academic work at Moravian the student is uncertain about his or her responsibility as a scholar or about the propriety of a particular action, the instructor should be consulted. The list below is not to be considered complete but rather covers the most common areas of concern. In general, students should be guided by the following principles.

Plagiarism

A major form of academic dishonesty is plagiarism, which the College defines as the use, whether deliberate or not, of any outside source without proper acknowledgement. While the work of others often constitutes a necessary resource for academic research, such work must be properly used and credited to the original author. This principle applies to professional scholars as well as to students.

An “outside source” is any work (published or unpublished) composed, written, or created by any person other than the student who submitted the work.

... All work that students submit or present as part of course assignments or requirements must be their original work unless otherwise expressly permitted by the instructor. ... When students use the specific thoughts, ideas, writings, or expressions of others, they must accompany each instance of use with some form of attribution to the source. Direct quotes from any source (including the Internet) must be placed in quotation marks (or otherwise marked appropriately) and accompanied by proper citation, following the preferred bibliographic conventions of the department or instructor.... Ignorance on the student’s part of bibliographic convention and citation procedures is not a valid excuse for having committed plagiarism. ... Students may not present oral or written reports written by others as their own work. ... They may not use writings or research obtained from any other student previously or currently enrolled at Moravian or elsewhere or from the files of any student organization (such as fraternities or sororities) unless expressly permitted to do so by the instructor. ... Students must keep all notes, drafts, and materials used in preparing assignments until a final course grade is given.... All such materials must be available for inspection by the instructor at any time.

Cheating

Students may not submit homework, computer solutions, lab reports or any other coursework prepared by, copied from, or dictated by others. If the student is employing the services of a tutor (whether from the College community or elsewhere), the tutor may not prepare the student’s work for class.

Students may not provide or receive unauthorized help in taking examinations, tests, or quizzes or in preparing any other performance requirements for a course. Such restrictions are illustrated by but not limited to the following:

• Using unauthorized material in an examination, test, or quiz.
• Using crib notes in any form, regardless of who prepared them.
• Using calculators or any other hand-held electronic devices unless authorized by the instructor.
• Using e-mail or text messaging during any exam without the permission of the instructor.
• Stealing, using or transmitting in writing, electronically, or verbally, actual examinations, tests, quizzes or portions thereof prior to or during an exam.
• Reading or observing another’s work without his or her consent, whether it be on paper, electronic form, or in any other medium.
• Soliciting or using a proxy test-taker or acting in that capacity.

False Testimony

Students may not offer a falsified excuse for an absence from an examination test, quiz, or other course requirement directly or through another source.

Students may not falsify laboratory results, research data, or results. They may not invent bibliographical entries for research papers, websites, or handouts. They may not falsify information about the date of submission for any coursework.
## Fall Term Calendar

### August 2007

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### November 2007

- **5th Group Project Presentation**
- **6th Group Project Presentation**
- **Position paper presentations**
- **Thanksgiving Break**
- **Position paper presentations**
- **Position paper presentations**
- **Last Classes**
- **Position Papers Due**

## December 2007

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### December 2007

- **Position paper presentations**
- **Position paper presentations**
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- **Last Classes**
- **Position Papers Due**