In this course, we shall address several important questions about the nature and methodology of science including—

- What are the distinguishing characteristics of science? How is science different from other areas of knowledge, such as history or philosophy? How can we tell whether something is a pseudoscience (i.e., a phony science)?
- Is “intelligent design theory” a real science or a pseudoscience?
- What is so special about science? Does it really deserve the high esteem in which it is held in contemporary society? Does science have any particular legitimacy as a way of knowing about the world? Is science superior to religion as a belief system?
- What is the scientific method? Is there a single scientific method? Or are there different methods for different sciences—physics, biology, sociology, etc.?
- How should scientists choose among competing scientific theories? Are there rules governing those choices? If so, what are they?
- What makes one scientific theory better than another? Do scientific theories give us a true description of the universe? Or are they only instruments for predicting and controlling natural events?

**Required Texts**

2. readings on the subject of evolution vs. intelligent design—on reserve

**Exams**

There will be 2 exams during the semester. There will also be an optional final examination during final exam week.

**Homework**

Homework will generally consist of your reading assigned material and preparing yourself to discuss the main questions(s) that we shall focus on in class. There will also be short writing assignments from time to time.
Class Activities

Class time will include such activities as lecture, general class discussion of pertinent issues, in-class writing, small-group discussions, and audio-video programs. Sleeping, day-dreaming, doing homework for other courses, solving Sudoku puzzles, and similar pastimes do not qualify as legitimate class activities. Anyone who engages in them will be marked “absent.”

Course Papers

You will write 2 course papers on topics in the philosophy of science. You will select your topics from lists of topics that I shall provide to you. The first paper will be due sometime around mid-term, and the second paper will be due near the end of the term. Your papers should be long enough to adequately discuss your topics and no longer. The grades your papers receive will not depend on how long or short they are. Typical papers will be 3-5 double-spaced typewritten pages long. Specific instructions for writing and submitting your papers will be provided later.

Final Course Grades

Your final course grade will depend on (1) your grades on the 2 exams, (2) your grades on the course papers, (3) your class attendance and participation grade, and (3) your grade on the final exam (if you choose to take the final exam). If you take the final exam, your grade on it will determine 50% of your final course grade, and your other grades (exams, papers, attendance/participation) will determine 50%. If you do not take the final exam, then your final grade will depend entirely on (1), (2), and (3). Of the portion of your grade that will be determined by (1), (2), and (3), the percentages are as follows:

40%: 2 exams
40%: 2 course papers
20%: class attendance and participation in class activities

Your class attendance/participation grade will depend mainly on your regular participation in class discussions. Students who attentively follow the discussions and who contribute to them by making pertinent observations or raising pertinent questions will receive high participation grades. This does not mean that the students who talk the most in class will receive the highest participation grades. I shall bear in mind that some people are naturally more talkative than others. It is enough for you simply to listen carefully to the discussions and to offer comments or ask questions when you believe you have something useful to say.

You should be present at the beginning of each class and stay until class is dismissed. If you must leave a class before the end of the period, you should notify the instructor before class begins. You will be given credit for attending in proportion to what portion of the class period you are in attendance. Whenever you miss class, it is your responsibility to get the notes for the class and to find out what announcements were made. If you arrive late for a class after the instructor has taken
attendance, be sure to notify the instructor at the end of the class so that you may receive credit for attending part of the class.

Final course grades will be assigned according to the following scale:

A: 93-100  
AB: 88-93  
B: 83-88  
BC: 78-83  
C: 73-78  
CD: 68-73  
D: 60-68  
F: 0-60  

Neither grades nor averages will be curved.

Record-keeping

You should keep copies of all written work—exams, course paper, quizzes, etc.—until your final course grade has been turned in at the end of the semester. This will enable us to resolve any questions that may arise about the recording and calculating of grades.

Academic Dishonesty (University Policy)

According to University policy, "Academic Dishonesty is prohibited and includes the following violations:

- Plagiarism—copying another’s work or ideas and calling them one’s own or not giving proper credit or citation.
- Cheating—intentional use of any unauthorized study aids, equipment, or another’s work during an academic exercise.
- Fabrication—intentional falsification or invention of any information or citation during an academic exercise without proper authorization.
- Facilitating academic dishonesty—allowing or helping another individual to plagiarize, cheat, or fabricate information.

Penalty: not less than academic integrity warning, not more than expulsion” (http://www.admin.mtu.edu/dos/rights/regulations.html)

This policy (stated above) will be followed in this course. At a minimum, graded work that involves plagiarism, cheating, or fabrication (as defined above) will receive a grade of zero, and no opportunity will be afforded to make up the work. Computer software may be used to detect plagiarism.

Disabilities

Reasonable accommodations will be made for students with certain medical and psychological disabilities. You should notify the course instructor at the beginning of the semester if you wish to request such accommodations.