CASPER COLLEGE COURSE SYLLABUS
GEOLOGY 2490 SECTION 01,
Topics: Geology Issues (Climate Change)

Semester/Year: Fall 2006

Lecture Hours: 1  Lab Hours:  Credit Hours: 1
Class Time: 6:00 - 7:50 p.m.  Days: Wednesday  Room: TM123

Instructor’s Contact Information:  Office Phone: 268-2498
Office Number: Tate Museum Room 103
Email: ksundell@caspercollege.edu
Home Phone: 473-2299 Please call prior to 10 p.m.  Office hours: MWF:
8:00 - 9:00 a.m., and MW: 3:00 - 4:00 p.m.

Course description:
Investigations and discussions of current issues in geology and earth sciences. Topics for consideration may include global warming, climatic change, Ice Ages, planetary geology, origins of life, evolution, coal bed methane, mineral extraction methods, or environmental geology. Students will read assigned topics and discuss in class. Students will use and develop their computer skills to access information and search existing data sets.

Statement of prerequisites: GEOL 1100 or consent of the instructor

Goal: Learn the major driving forces of climate change on Earth. Learn how climate has changed on Earth based on geologic and geochemical (isotopes) data. Learn about climate change on Earth relative to the solar system. Compare the climate history and active geological processes on Mars to Earth’s. Learn how to access newly released NASA and JPL, and other data sets to test hypotheses about simultaneous global warming of both Earth and Mars.

Outcomes:
This course is designed to give students of earth science the opportunity to explore, research, and discuss with their peers a variety of intriguing issues in Earth science today. The student will at the end of the course understand the scientific evidence supporting each topic and how it fits into the local, regional, and worldwide perspectives. The student will gain skills in researching topics, critically reading papers, oral and written presentation of ideas, and social discussion of complex issues. This semester’s climate change project will give students experience in researching and testing the many multiple working hypotheses of a very controversial and political issue.

Methodology:
This course will consist of initially selecting a primary topic to be researched and studied in detail throughout the course. The instructor will select readings for the class concerning the topic and combine lecture with seminar style discussions each period.

Evaluation criteria:
Student will be evaluated by writing a term paper about the topic. Participation in the day to day discussions in a seminar class is imperative. Therefore, students will be expected to attend each and every class meeting, having read the assigned readings and enter into discussions with the instructor and other students in the class.

APPROXIMATE POINT DISTRIBUTION
Term paper  100 points
Participation (12 pts/class)  96 points

TOTAL POINTS POSSIBLE: 196

GRADE CUTOFFS:  A: 90%+; B: 80-89%; C: 70-79%; D: 60-69%; F: <60%

Required Text, Readings, and Materials: Global Warming by Houghton

Class Policies: Last date to change to Audit Status or to Withdraws with a W Grade:

Student rights and responsibilities: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

Academic dishonesty- Cheating and Plagiarism: Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offence was committed or expulsion from school. See the Casper College Student Code of Conduct.

Chain of Command: If you have any problems with this class, you should first contact the instructor in order to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take your problem through the appropriate chain of command starting with the department head, then the division chair, and lastly the vice president for academic affairs.

ADA Accommodations Policy: It is the policy of Casper College to provide appropriate accommodations to any student with a documented disability. If you have a need for accommodation in this course, please make an appointment to see me at your earliest convenience.

STUDENT RIGHTS AND RESPONSIBILITIES: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

Calendar or schedule indicating course content:

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPIC</th>
<th>READING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 30</td>
<td>Introduction. Background of drivers of climate change on Earth</td>
<td>All chapters ASAP</td>
</tr>
<tr>
<td>Sept. 13</td>
<td>Background continued and Climate change of Mars and solar system.</td>
<td>NASA/JPL websites</td>
</tr>
<tr>
<td>Sep. 27</td>
<td>New Information/ideas. Decide on a project or hypothesis to test.</td>
<td>Ch.</td>
</tr>
<tr>
<td>Oct. 11</td>
<td>Research and presentations</td>
<td>Ch.</td>
</tr>
<tr>
<td>Oct. 25</td>
<td>Research and presentations</td>
<td>Ch.</td>
</tr>
<tr>
<td>Nov. 15</td>
<td>Research and presentations</td>
<td>Ch.</td>
</tr>
<tr>
<td>Nov. 29</td>
<td>Research and presentations</td>
<td>Ch.</td>
</tr>
<tr>
<td>Dec. 13</td>
<td><strong>Term Paper or Presentations Due.</strong></td>
<td>Ch.</td>
</tr>
<tr>
<td></td>
<td><strong>Finals Dec. 18-21. No Final Exam.</strong></td>
<td>All Readings</td>
</tr>
</tbody>
</table>