Course Description: We will explore Earth’s physical and biological systems and human interaction with the environment. This will include coverage of: climate, rocks, soils, ecosystems, human population, land use, energy use and its consequences, environmental policy, air and water pollution, and conservation issues. (2 hrs lect, 2 hrs lab) This course fulfills the Lib. Ed. Category 4 requirement as well as the international perspective requirement (through discussion of human demography and global environmental issues).

Course Goals: To give you (the student) a sense of how the world around you works and how your existence affects the Earth and the organisms living on it. Given this goal, the focus of the course is on understanding concepts, not on memorizing terminology. Some terminology is necessary, but it will be important in the context of a broader concept.

Course Expectations: You are expected to have done the reading assignments before each lecture and may be called upon during lecture to answer questions from the reading. You should use the lectures as a guide for what is important to study from the reading for the exams. If material from the reading is not covered in lecture, it will not be on the exams. Exams (see below) are designed to give you an opportunity to convey what you have learned.
Thur, Apr 10  Renewable/Alternative Sources: Hydro, Solar, Nuclear  487-525  PR: Energy (9-end)

Tues, Apr 15  Global Warming - Evidence, Remedies?  383-391  PR: The Earth; Climate/Edmonds*

Thur, Apr 17  Understanding Past Climates: Global Warming in Perspective

POLLUTION

Tues, Apr 22  Air Pollution  395-420  PR: Air Pollution XI. Waste Disposal

Thur, Apr 24  Soil – Pesticides  255-274  LR: Pest Control

Tues, Apr 29  Water Pollution; Solid, Toxic, and Hazardous Waste  447-474; 527-548  PR: Water (10-end); PR: Waste XII. Struggling to Maintain Biodiversity

CONSERVATION

Thur, May 1  Biodiversity  275-297  LR: Biodiversity Extra Credit Book Reviews Due

Tues, May 6  Sustainable Cities  549-569  XIII. Globalization; Think locally act globally

Thur, May 8  Summing it all up!  571-596

MON, MAY 12  FINAL EXAM  10-12 **Note: This is not the time listed in the final exam schedule!!

* Can be found on the web site http://www.gcrio.org/CONSEQUENCES/. Crowley’s is in Vol. 2, No. 1; Edmonds’ is in Vol. 5, No. 1.

** ESP = Environmental Study Partner, the CD included with the textbook. Pr = Principles section; Po = Population section; LR = Living Resources section; PR = Physical Resources Section

LABS:
The labs are run by the TAs and will meet every week, including the first week of class, except when we have exams. If you miss a lab, please contact your TA about making it up, but realize that you may not get full points on the lab. Their contact information and office hours are as follows:

Darin Albrecht  dalbrech@d.umn.edu  Sec 002 (Mon 1-3; rm 120); Sec 007 (Th 8-10); Sec 008 (Th 12-2)
Office hours: Th 10-12, 224 Heller Hall

Leah Gruhn  gruh0005@d.umn.edu  Sec 003 (Mon 1-3; rm 126); Sec 006 (W 2-4); Sec 009 (F 10-12)
Office hours: Mon 3-4, 202 Heller Hall

Carrie Heiling  cheiling@d.umn.edu  Sec 004 (Tues 2-4); Sec 005 (W 10-12)
Office hours: Tu and W 1-2, 202 Heller Hall

GRADING:

Exam I  20%
Exam II  20%
Quizzes  10%
Lab  25%
Final Exam  25%

EXAMS:
Exams are a combination of short answer, fill in the blank, and true/false. There is no multiple choice. This is a conscious choice – in the past, exams were multiple choice and very challenging. Unfortunately, I found that I was testing student’s ability to take multiple choice exams as much as I was testing whether or not they knew the material. By using a short-answer/fill-in-the-blank format, I give you the opportunity to show what you have learned – you can’t over-think a multiple choice question and come up with the wrong answer even though you understood the material. This means that you need to understand and be able to put
extra credit each of the concepts/topics discussed in class. For this reason, many students find the exams quite challenging.

EXTRA CREDIT:

Quizzes and Exams
Occasionally, the quizzes will have extra credit questions. These extra credit questions will be about recent articles in the Duluth News Tribune that are about environmental issues. Exams will have an extra credit question about local environmental issues.

Book Reports
For students who have an avid interest in environmental science, you can get extra credit by reading a book from a list of relevant titles of new publications. To get extra credit, a 5 page book report must be turned in by Thursday, May 1st. For an excellent book report (A), the student’s course grade will be raised by a half grade (i.e. a B+ will become an A-). See the course website for further details.

POLICIES:

1. All enrolled students are expected to attend class.
2. Exams will be a combination of true/false, fill in the blank, and short answer. Quizzes will be unannounced and will be at the beginning of the class period. If you are late to class or absent, you cannot make up the quiz – NO EXCEPTIONS. To allow for students being ill, etc., one quiz will be dropped at the end of the semester. Regular quizzes will consist of a few simple questions on the material from the previous lecture. One question may be from the Environmental Study Partner.
3. Exams cannot be made up unless the student has made arrangements at least two weeks ahead of time in anticipation of an absence that is excused according to the policies in the University of Minnesota Duluth 2001-2003 Catalogue. Make-up exams will be short answer and essay questions. Please consult me at the BEGINNING of the semester about any religious observances you have that are in potential conflict with Exams, Quizzes, and/or Labs.

Individuals who have any disability, either permanent or temporary, which might affect their ability to perform in this class are encouraged to inform the instructor at the beginning of the semester. Adaptation of methods, materials, or testing may be made as required to provide equitable participation.