Climate Change (GEO 122)
Fall 2011

Professor
Dr. Rhawn Denniston Office: 202 Norton Geology Office Phone: x4306 Office Hours: 11:15-11:45 M,W,Th,F

Text and Readings
Students should buy *Earth's Climate Past and Future* (2nd edition) by W. Ruddiman. I will provide various journal and newspaper articles. In addition, readings will be required from several introductory geology textbooks currently on reserve in Cole library.

Course Meeting Times: 9:15-11:15 M-F; 1:15-3:00 as scheduled

Grading Scheme:	25% Exam 1	25% Final Exam	15% Quizzes	15% Problem Sets	15% Poster	5% Participation/Attendance

Policy on Late Work
Homework assignments, papers, and exams are to be completed within the scheduled time frame. You will be penalized 25% for every day that the assignment is late. If you have a college-sanctioned excuse for missing class or an assignment deadline, notify me immediately.

Academic Honesty

Cornell College expects all members of the Cornell community to act with academic integrity. An important aspect of academic integrity is respecting the work of others. A student is expected to explicitly acknowledge ideas, claims, observations, or data of others, unless generally known. When a piece of work is submitted for credit, a student is asserting that the submission is her or his work unless there is a citation of a specific source. If there is no appropriate acknowledgement of sources, whether intended or not, this may constitute a violation of the College's requirement for honesty in academic work and may be treated as a case of academic dishonesty. The procedures regarding how the College deals with cases of academic dishonesty appear in The Compass, our student handbook, under the heading "Academic Policies – Honesty in Academic Work."

Students with Disabilities

Students who need accommodations for learning disabilities must provide documentation from a professional qualified to diagnose learning disabilities. For more information see cornellcollege.edu/disabilities/documentation/index.shtml. Students requesting services may schedule a meeting with the disabilities services coordinator as early as possible to discuss their needs and develop an individualized accommodation plan. Ideally, this meeting would take place well before the start of classes. At the beginning of each course, the student must notify the instructor within the first three days of the term of any accommodations needed for the duration of the course.

Monday	Tuesday	Wednesday	Thursday	Friday
WEEK 1				
9:15 - Earth structure and evolution; rocks and minerals 1:15 – no lab HW: none Reading: Anthropocene; appropriate chapters from geo text on reserve in library	9:15 – **QUIZ 1; discuss Anthropocene;** sedimentary rocks; depositional settings; evolution of life; geologic time 1:15 – sedimentary rocks and minerals HW: none Reading: appropriate chapters from geo text on reserve in library	9:15 – tectonics; structural geology **12:30 – 2:00** – tectonics computer lab (meet in Cole Library Rm 212) HW: PS 1 Reading: appropriate chapters from geo text on reserve in library	9:15 – **QUIZ 2**; PS 1 due; igneous rocks and minerals 1:15 - modern climate system; tectonics and long-term climate HW: none Reading: Ch.1,3; appropriate chapters from geo text on reserve in library	9:15 – tectonics and long-term climate (cont'd); Snowball Earth; intro to isotopes; Greenhouse Earth 1:15 – no lab HW: PS 2 Reading: Ch.4,5
WEEK 2				
9:15 – **Quiz 3**; PS 2 due; Icehouse Earth 1:15 – isotope lab HW: PS3 Reading: Plank. Paleo, Ch.6	9:15 – PS 3 due; discuss Plankton. Paleotherm; Icehouse Earth (cont'd) 1:15 – review session HW: none Reading: none	9:15 – **MIDTERM EXAM;** research topics assigned 1:15 – no lab HW: PS 4 Reading: none	9:15 - PS 4 due; Milankovitch cycles; research topics assigned 1:15 - Milankovitch cycles, SPECMAP HW: none Reading: Ch.7,9	9:15 – **Quiz 4**; insolation and monsoons 1:15 – no lab HW: PS 5 Reading: Ch.8
WEEK 3				
9:15 - PS 5 due; long change CO_2 & CH_4 1:15 – no lab HW: none Reading: Ch.10	9:15 – **Quiz 5**; millennial-scale climate 1:15 – ice core lab (meet in Cole Library Rm 212) HW: PS 6 Reading: Ch.14	9:15 - PS 6 due ; climate archives 1:15 - Last Glacial Maximum and deglaciation; HW: PS 7 Reading: Ch. 12,13	9:15 – **Quiz 6**; PS 7 due; Holocene climates 1:15 - the last 1,000 years HW: PS 8 Reading: Ch.15,16	9:15 - PS 8 due; cultural responses to climate change 1:15 – "An Inconvenient Truth" HW: PS 9 Reading: "Collapse of the Maya"
WEEK 4				
9:15 – **PS 9 due; Quiz 7**; discuss "Collapse of the Maya"; future climate projections and effects 1:15 - no lab HW/Reading: none	9:15 - executive summaries due; poster presentations 1:15 – review session HW/Reading: none	9:15 – **FINAL EXAM**		