

Earth Surface System (GEO 320)
Fall 2014

Professor - Rhawn Denniston

Office: 202 Norton Geology

Office Phone: x4306

Office Hours: 11:15-11:45; 3:00-3:30

Text, Readings, and Materials – *Applied Hydrogeology (3rd edition - ??)* by Fetter; You should also bring a calculator

Course Meeting Times – 9:15-11:15 (except the first day!) and 1:15-3:00 daily

Grading Scheme Problem Sets 25% Midterm Exam 25% Final Exam 30% Discussion/Participation 10% Paper Presentation 10%

Discussion/Participation – This is a 300-level course required for the geology major. I expect exceptional effort and professionalism from each of you, both inside and outside the classroom. You should arrive to class on time, do the homework and the readings thoroughly and carefully, engage in class discussion, and ask questions immediately (!) when you have them. Your grade will be evaluated based on the depth of your insight, your willingness to contribute to the class, and your worth ethic.

Fieldtrips – There will be several short fieldtrips. Please contact me immediately with any concerns about scheduling, health, or other issues that may impact your ability to actively participate.

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 – I expect your work to be entirely your own. Papers should be written in your own words and should you reflect your own ideas. We'll discuss proper writing techniques in class but consult *The Compass* for additional information. See me with any questions. 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 acknowledgment 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. 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.

Cell Phones and Computers – Receiving or making a text or phone call during class hours may result in your immediate expulsion from the class. Computers may be used during lecture, but using them for reasons not directly related to the course material at hand will result in your expulsion from class. More than one of any of these infractions will result in a grade of F for the course.

Course Description and Goals - This course will address two fundamental issues: (i) the evolution of the land surface through the combined effects of uplift and weathering, and (ii) the dynamics of water in the atmosphere, on Earth's surface, and in the shallow crust.

Monday	Tuesday	Wednesday	Thursday	Friday
WEEK 1				
9:00: <i>Atmospheric and Surface Water</i> 1:15: <i>Watersheds, Overland Flow; Streams</i> Reading: HW: Excel tutorial; Prob Set 1	9:15: Prob Set 1 due; <i>Streams</i> 1:15: <i>Infiltration</i> Reading: HW: Prob Set 2	9:15: <i>Groundwater;</i> Prob Set 2 due 1:15: <i>Groundwater</i> Reading: HW: Prob Set 3	9:15: <i>Groundwater;</i> Prob Set 3 due 1:15: <i>Groundwater</i> Reading: USGS Subsidence Report HW: Prob Set 4	9:15: <i>Groundwater;</i> Prob Set 4 due 1:15: <i>TBD</i> Reading: HW: Prob Set 5
WEEK 2				
9:15: <i>wells;</i> Prob Set 5 due 1:15: <i>wells</i> Reading: HW: Prob Set 6	9:15: Prob Set 6 due; <i>wells</i> 1:15: <i>wells</i> Reading: HW:	9:15: <i>groundwater chemistry</i> 1:15: <i>groundwater contamination</i> Reading: HW: none	9:15: Fieldtrip to Water Plants 1:15: <i>TBD</i> Reading: HW: study for midterm exam	9:15: Midterm Exam 1:15: no class Reading: HW:
WEEK 3				
9:15: <i>Soils</i> 1:15: <i>Soils</i> Reading: HW: Prob Set 7	9:15: Prob Set 7 due; Fieldtrip to Burge Farm 1:15: <i>TBD</i> Reading: HW: type and clean up field notes	9:15: fieldnotes due; <i>Karst</i> 1:15: <i>Karst</i> Reading: HW:	8:45: ALL DAY FIELDTRIP - Fieldtrip to Spook Cave and NE Iowa Readings: none HW: type and clean up field notes	9:15: fieldnotes due; <i>Climate and glacial landscapes</i> 1:15: <i>landscape evolution</i> Readings: HW:
WEEK 4				
9:15: <i>landscape evolution</i> 1:15: <i>landscape evolution</i> Readings: HW:	9:15: <i>landscape evolution</i> 1:15: review session Readings: none HW: study for final exam	8:30: Final Exam		