

AGLY 201: Integrated Earth Science --- Tentative Syllabus
4 credit hours; Spring, 2005.

Instructor: Karin L. Willoughby, Office #207, Science Building.

Office Hours: Mon. at 1-2 pm; Tue. and Wed. 1-1:30 pm; Fri. at 11:15 – 11:45 am and by appt.

Time: Lecture: 12 -12:50 pm, MWF. Room 327.

LAB (Room 212): Sec. 1, Mon. at 2:30 – 5:10 pm; Sec. 2, Wed. at 9 - 11:40 am

Texts: Earth Science Today by Murphy and Nance; Earth Lab: Exploring Earth Sciences by Owen, Pirie and Draper

This course explores a holistic view of the earth. The atmosphere, lithosphere (solid earth), hydrosphere (oceans, surface fresh water and groundwater) and the solar system will be studied as specialized systems with identifiable internal compositions, natural processes and behavior patterns. The interactions among these systems and the biosphere are also investigated. Examples of such interactions include tides, waves, weather, climate, global change, plate tectonics and energy resources.

Students are expected to acquire and demonstrate knowledge about what these systems are, how they work and how they interact; and build individual ability to understand the implications of earth systems' effects on the future of earth and human beings form.

Grading: Lecture -- 75% of class grade

Maximum possible points: 200 points (100 pts. each) on 2 exams
100 pts. (50 points each) on 2 quizzes
160 pts. on homework
100 pts. semester project
30 pts. oral presentation
150 pts. Final exam
10 pts. Class participation
750 pts. Subtotal

Laboratory -- 25% of class grade*

Maximum possible points: 120 pts. on 12 of 13 lab reports (10 points each) (lowest lab grade dropped)
120 pts. (60 pts. each) on 2 quizzes
10 pts. on assigned topic presented orally to lab class
250 pts. Subtotal

Total possible points = 1000; Course grade will be based on: 900 or more points = A.
800 - 899.9 pts. = B. 700 - 799.9 pts. = C. 600 - 699.9 pts. = D Below 600 pts. = F.

* NOTE: Laboratory must be passed in order to pass course.

If you have a physical, psychological, and/or learning disability which might affect your performance in this class, please contact the Office of Disability Services 126A, B&E, (803)641-3609, as soon as possible. The Disability Services Office will determine appropriate accommodations based on medical documentation.

Tentative LECTURE Schedule

Reading Assignment

		Text Chapter	
January	10	Introduction to course; HOMEWORK ASSIGNMENTS	1
	12	Intro cont'd; semester project	
	14	Minerals	2
	17	HOLIDAY	
	19	Minerals cont'd	
	21	Select semester project assignment**; Minerals cont'd	
	24	Rocks	
	26	Rocks, cont'd; Geologic Time and the Earth	3
	28	Time cont'd	
	31	Time cont'd	
February	2	Time cont'd	
	4	Plate Tectonics	4, 5
	7	Tectonics cont'd; turn in at least 5 preliminary resources on project topic.	
	9	Tectonics cont'd	
	11	LECTURE QUIZ #1 (Chapters 1, 2, 3)	
	14	Tectonics cont'd	
	16	Mountains and Volcanoes	6
	18	Mountains and Volcanoes cont'd	
	21	The Earth's Interior	7
	23	The Earth's Interior cont'd	
25	Ocean Water	8	
March	28	Ocean Water cont'd	
	2	Circulation of Oceans	9
	4	EXAM #1 (Chapters 4 -7)	
	7 -11	SPRING BREAK	
	14	Circulation of Oceans cont'd	
	16	Atmosphere	11
	18	Atmosphere cont'd	
	21	Atmospheric Circulation	12
	23	Atmospheric Circulation cont'd	
	25	Fresh Water	10
April	28	Water cont'd	
	30	Water cont'd	
	1	History of the Earth	13, 14
	4	History the Earth cont'd	

- 6 Work on semester project
- 8 EXAM #2 (Ch. #8 - 12)

- 11 Planets 15
- 13 Presentations (from Wed. lab)
- 15 Planets cont'd; Quiz #2 (Ch. 13- 14)

- 18 Presentations (Mon. lab); PROJECT NOTEBOOK IS DUE
- 20 Sun and Stars 16
- 22 Sun and Stars cont'd

- 25 Summary and Review

May 2 FINAL EXAM (Ch. #15 -16 plus review of all chapters) (11 am - 2pm)

** The student project and oral presentation requires thorough research on a selected topic. Preliminary resources (at least 5 references) must be located and turned in by Feb. 7 for full credit on the project. The project is a notebook containing several written and visual products. The notebook is DUE April 18. The oral presentation must be about 7-9 minutes long and discuss in detail one or more facets of the major research topic.

Punctual and regular attendance is essential for full participation in class. The instructor reserves the right to give an automatic "F" to any student that misses 7 or more lectures. There will be no instructor directed make-ups available for missed labs. The student is responsible for obtaining notes to missed material. Make-up lecture exams or lab quizzes will be given only for emergencies considered acceptable to the University (death of close relative, religious holiday, jury duty, illness with Dr.'s excuse) and approved by the instructor. Only documented excuses will be considered for approval. **The student is still responsible for missed material, even with excuse.**

Tentative Lab Schedule

- Jan. 10-12 Minerals (counts as 2 labs)
- Jan. 17 HOLIDAY
- Jan. 19-24 Rocks (counts as 3 labs); assigned oral report is DUE
- Jan. 26-31 Minerals and Rocks cont'd
- Feb. 2-7 Correlation and Geologic Time
- Feb. 9-14 Plate tectonics/Earthquakes
- Feb. 16-21 Rocks and Minerals cont'd
- Feb. 23-28 LAB QUIZ # 1 (on rocks and minerals)
- Mar. 2-14 Oceans
- Mar. 7-9 SPRING BREAK
- Mar. 16-21 Wind and Atmosphere (counts as 3 labs)
- Mar. 23-28 Wind and Atmosphere, cont'd
- Mar. 30-Apr.4 Wind and Atmosphere, cont'd
- Apr. 6-11 LAB QUIZ # 2 (on wind and atmosphere)
- Apr. 13-18 STUDENT PRESENTATIONS
- Apr. 20-25 Planetarium; Planets (counts as 2 labs)