

**GEOG 422/522 ADVANCED TOPICS: GEOMORPHOLOGY OF ALLUVIAL FANS
POLICIES AND PROCEDURES**

Winter 2001 Term - University of Oregon
4 CR MW 4:30 - 5:50 PM Condon Hall, Rm 360

INSTRUCTOR: Dr. Steve Taylor, Visiting Asst. Professor OFFICE: Rm 208 Condon Hall

OFFICE HOURS: W 6-7 PM
By Appointment

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REQUIRED READINGS:

The class is built around a select set of journal articles and text readings, to be provided by the instructor. A compendium of "classic" and "recent" literature on alluvial fans will be assembled in electronic format and distributed to students as needed.

COURSE DESCRIPTION:

Classically, alluvial fans represent radiating, cone-shaped accumulations of sediment that occur at the piedmont interface between mountainous watersheds and adjacent basins. Fans represent important landscape elements that commonly comprise hydrologic boundaries, ecological transition zones, sites of human occupation, settings for water resource development, and dynamic areas associated with geomorphic hazards. This course will focus on fan-related processes and landforms that occur in a wide range of climatic and tectonic regimes. Studies will include systematic analysis of fans in the context of watershed processes, sediment production and transport, climatic and geologic controls, and landscape ecology. Class exercises will include literature review, student-driven discussions, interpretation of remote sensing imagery, map/spatial analyses, and related quantitative approaches to geomorphic problem solving.

ABOUT THE INSTRUCTOR:

Taylor (that's me) is filling in as an adjunct visiting professor at UO for Winter Term 2001. He is currently an Assistant Professor of Geology in the Earth and Physical Sciences Department at Western Oregon University. His areas of interest and background include applied environmental geology (5 years as a professional hydrogeologist in the environmental consulting industry), sedimentary basin analysis (M.S. research on early Tertiary strike-slip basins in central Washington - Washington State University), fluvial geomorphology, and GIS applications in the Earth Sciences (Ph.D. research on surficial processes in humid-mountainous watersheds of the central Appalachians - West Virginia University). He has studied fans in both the ancient rock record and modern geomorphic environment, and is excited about continuing that study with colleagues (i.e. you!) in the Geography Department at the University of Oregon.

CLASS WEB SITE:

Class notes, news, bulletin boards, and related resources will be made available via the class web site as the term progresses. The URL is www.wou.edu/taylor, follow the links to "Geog 422/522 Alluvial Fans". Since the instructor will be visiting from off-campus, the class web site and e-mail facility will be the primary forum for course-related communication (as long as the electric supply holds out, the internet provides access to 24 hour-a-day communication).

EVALUATIONS AND EXPECTATIONS:

Student performance will be evaluated on the basis of 2 exams (Midterm, Final) and class exercises. The following breakdown of evaluation points and letter grades:

	Geog 422 (UG)	Geog 522 (G)
Midterm Exam	100 pts	100 pts
Final Exam	100 pts	100 pts
Class Exercises	100 pts	100 pts
Thesis Project	N/A	50 pts
TOTAL:	300 pts	350 pts

Exams will be administered at evenly spaced increments throughout the term. The final will be 20% comprehensive with select test material drawn from before the midterm, but focusing primarily on the second-half of the class. Exam will consist of essay questions, short answer / definition, and lab-type problems. Note: excessive babbling on essay questions is strongly discouraged, succinct discussions with labeled drawings will be most favorable. Due dates for class exercises will be prescribed by the instructor. Late work will be accepted up to 1 week after the due date, but will be automatically assessed a penalty of -20% of the point total. Graduate students are required to complete an additional thesis-related project of their own design. Possible thesis projects include bibliography development, background research, proposal development, data analysis, chapter writing, etc. (any idea that will help you advance your research).

Final Grading Scale

Percent Range	Letter Grade	Percent Range	Letter Grade
94-100%	A	77-79%	C+
90-94%	A-	73-76%	C
87-89%	B+	70-72%	C-
83-86%	B	67-69%	D+
80-82%	B-	63-66%	D
		60-62%	D-
		<60%	F

MAKE-UP EXAMS:

Under NO circumstances will make-up exams be administered without prior arrangement (at least five days) and good reason. Written administrative excuses will be required. Please show up on exam day!

FIELD TRIP(S):

Local field trips and field exercises may be scheduled during the term as time and weather permit. Please be aware that additional scheduling and personal time may be required as the course develops.

A NOTE ABOUT INCOMPLETES:

No incompletes will be given during the last week of class. If you have a problem that warrants an incomplete, make arrangements prior to the last week (no exceptions!!).

TENTATIVE CLASS SCHEDULE: This outline should be considered tentative at best. The following schedule may be modified as class ideas evolve throughout the term.

Week	Dates	Class Content
1	Jan. 8, 10	Class Introduction / Basic Principles
2	Jan. 15 Jan. 17	No Class MLK Day Alluvial Fan Classification / Mode of Occurrence
3	Jan. 22, 24	Classification / Mode of Occurrence (cont.) Watershed Processes Part 1 - Sediment Production
4	Jan. 29, 31	Watershed Processes Part 2 - Sediment Transport
5	Feb. 5, 7	Depositional Environments
6	Feb. 12, 14	Midterm Exam Week / Open Schedule EXAM 1 - Tuesday Feb. 12
7	Feb. 19, 21	Quantitative Analysis of Fans (Part 1)
Feb. 23 - Last Day to Withdraw		
8	Feb. 26, 28	Quantitative Analysis of Fans (Part 2)
9	Mar. 3, 7	Tectonic and Climatic Controls on Fan Processes
10	Mar. 12, 14	Environmental Applications - Landscape Ecology, Landuse, Water Resources, Geomorphic Hazards
11	Mar. 19-23	Finals Week - EXAM 2 (See Schedule for Day and Time)
Grades Due 03/26/01		