

GEOG 472/672 GEOGRAPHY OF ARID LANDS
SPRING '06 SYLLABUS
LECTURE TR, 11:00-12:15, MS 227

Instructor: Dr. Jill S. Heaton
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Course Description – This course is designed to introduce you to the geography and ecology of arid lands with particular emphasis on North American Deserts. We will take an ecosystem approach balancing pattern and process across multiple scales. Please see the attached Course Outline for details.

Required Text

Ecology of Desert Systems, Walter Whitford, 2002
Desert Reader, as provided by Dr. Heaton

Undergraduate grades derived from:

Assignment	Pts	%
Midterm	100	18
Final	100	18
Homework (xpts each x 2)	100	18
Discussions (xpts each x 2)	100	18
Presentation	50	10
Field Trip Journal	100	18
TOTAL	550pts	100%

Graduate grades derived from:

Assignment	Pts	%
Midterm	100	15
Final	100	15
Homework (50pts each x 2)	100	15
Discussions (25pts each x 4)	100	15
Presentation	50	10
Field Trip Journal	100	15
Lecture	100	15
TOTAL	650pts	100%

Final Grade Calculation

93-100% (4.0)	= A	90-92.9% (3.7)	= A-
87-89.9 (3.3)	= B+	83-86.9 (3.0)	= B
80-82.9 (2.7)	= B-	77-79.9 (2.3)	= C+
73-76.9 (2.0)	= C	70-73.9 (1.7)	= C-
67-69.9 (1.3)	= D+	63-66.9 (1.0)	= D
60-63.9 (0.7)	= D-	Below 60% (0.0)	= F

Lecture Attendance Policy – There is no attendance policy for lecture. However, trust me, it will be to your benefit to attend class regularly. Plus, if you are not there for the discussions or the presentations you can't get the points! There are no unexcused make-ups for the discussions or the presentations.

Field Journal Requirements – **Field trip location and dates TBD.** You will be required to keep a journal of activities, observations, discussions, etc. as encountered during our field trip. I encourage you to draw diagrams, figures, tables and even take photographs if appropriate. I will take lots of photographs during the field trip and make them available to you. If you have illegible hand writing I suggest that you type up the text. If I cannot read it I cannot grade it.

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SPRING '06 COURSE OUTLINE
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Lectures, Assignments, Exams

WEEK 1	
24 January	Lecture: No Lecture
26 January	Lecture: Introduction, Global Patterns of Aridity Homework: Find, read and write a half paragraph summary on one article (popular or scientific) with regards to water transfer at the Salton Sea from agricultural to urban (namely San Diego). E-mail me both the article and your summary. Due by 31 January
WEEK 2	
31 January	Lecture: Characterization of Desert Climates (Chapter 3)
02 February	Lecture: Conceptual Framework and Paradigms (Chapter 1)
WEEK 3	
07 February	Lecture: Landforms, Geomorphology, and Vegetation (Chapter 2)
09 February	Lecture: Quintessential North American Desert Plants. Saga, Creosote, Saguaro and Joshua Trees
WEEK 4	
14 February	Lecture: Wind and Water Processes (Chapter 4)
16 February	Lecture: Biological Soil Crust (http://www.soilcrust.org/)
WEEK 5	
21 February	Lecture: Patch-Mosaic Dynamics (Chapter 5)
23 February	Lecture: Continuation of Patch-Mosaic Dynamics Presentations: 10-15 minute presentation, 5-10 minute discussions on pre-selected readings. See reader. Topics: Seed distribution, Nurse Plants and Animal Produced Patches. Presentations should include approximately 8 power point slides summarizing the article and how it relates to Tuesday's lecture and Chapter 5 in the book. Where possible use pictures and/or photos. I can help provide photos and give you access to a scanner if need be.
WEEK 6	
28 February	Lecture: Plant Adaptations (Chapter 6)
02 March	Lecture: Animal Adaptations (Chapter 6) Homework: Find, read and write a 1 page summary on one scientific article on either plant or animal adaptations to desert environments. E-mail me both the article and your summary. You must find your own article, however I would be more than willing to help you locate one. Due by 07 March
WEEK 7	AAG
07 March	Lecture: Review
09 March	Lecture: Exam I
WEEK 8	
14 March	Lecture: No Class
16 March	Lecture: No Class
WEEK 9	SPRING BREAK
21 March	SPRING BREAK
22 March	SPRING BREAK
WEEK 10	
29 March	Lecture: Sky Islands (See Reader)
30 March	Lecture: Limits to Geographical Distribution Marmots and Pikas Discussion: See reader
WEEK 11	

04 April	Lecture: Decomposition and Nutrient Cycling (Chapter 9)
06 April	Lecture: Fertile Islands Discussion: See reader
WEEK 12	
11 April	Lecture: Fire Regimes and Invasive Species Discussion: See reader
13 April	Lecture: Land Use in the Mojave Desert Discussion: See reader
WEEK 13	NGIS
18 April	Lecture: No Class
20 April	Lecture: No Class
WEEK 14	
25 April	Lecture: No Class
27 April	Lecture: No Class
WEEK 15	
02 May	Lecture: North American Desert Parks
04 May	Lecture: Desertification (Chapter 10)
WEEK 16	FINALS WEEK STARTS Wednesday
08 May	Lecture: Review Field Trip Journal due!
10 May	
Friday 11 May	Final: 0730-0930