

Course Syllabus
 ATMS 241
 Geography in Meteorology
 Spring 2009

Description: An introduction to cartography, geographic visualization, and elementary spatial statistics, with an emphasis on meteorological applications. (*1 Credit; Corequisite: ATMS 103 or 105*)

Key Topics: Physical Geography: Basics of physical geography with emphasis on climate.
Cartography: Fundamental of map drafting, compilation, symbolization, scales, projections, and map classification.
Spatial Statistics: Distributions, correlation, regression, uncertainty, and hypothesis testing.
Visualization and Communication: Using maps to convey meteorological content.

Instructor: Mr. Tim Owen, RBH 236B, Department of Atmospheric Sciences
 (828) 232-5159 (department office); (828) 258-9668 (home; no calls after 9 pm please)
 towen@unca.edu (e-mail)

Hours: Course: 12:45 – 2:25 pm Monday; Office: After class or by appointment.

Text: None. Handouts provided by instructor. Colored pencils and 3-ring binder strongly suggested.

Grading: Assignments (45%); Quizzes (45%); Class Participation (10%)

Grade Scale: (Final grade rounded) A: >= 90%, B: 80-89%, C: 70-79%, D: 60-69%, F: <60%;
 +/- Added to Numeric Grades within 2% and 1% of a Grade Threshold, respectively (D and F excepted)

Notes: Assignments: Time will be provided in class to start each assignment, which will be due at the beginning of the next class. Late assignments will be penalized 10% if turned in within one week of due date; otherwise, they will be penalized 25%.
Quizzes: Three non-cumulative quizzes (each worth 15% of the course grade) will be given. Quizzes will be 45 minutes in length and based on handouts, assignments, and class lectures.
Class Cancellations: If class is cancelled for any reason, handouts and assignments will be provided by e-mail and will be completed during the next class period.

Class	Date	Assignment	Quiz	Subject
1	Jan 26	1		Introduction to Maps and Physical Geography
2	Feb 2	2		Statistics Primer for Mapping
3	Feb 9	3		Tools of the Cartographic Trade
4	Feb 16	-		Fundamentals of Cartographic Design
5	Feb 23	4	1	Quiz, Four Colors Suffice
6	Mar 2	-		Map Projections
	Mar 9			Spring Break – No Class
7	Mar 16	5		Graphing Spatial Data
8	Mar 23	6		Spatial Correlation
9	Mar 30	-		Mapping and Regression Techniques
10	Apr 6	7	2	Quiz, Traveling Salesman Problem
11	Apr 13	8		Characterizing Uncertainty in Maps
12	Apr 20	9		Spatial Communication I
13	Apr 27	10		Spatial Communication II
14	May 4	-	3	Quiz, Course Wrap-Up