

OBR	
Received(time)	10:48am
Date	1/18/06

**Ohio Articulation Number (OAN)
Course Submission Form
2005-2006**



College/University The University of Akron

Course(s) Submitted(Title & Course #) 3350:310 for
Ohio Articulation Number OSS 006 GEOG

Date 1-12-06

Name and title of individual submitting on behalf of the college/university

Name Dr. Robert Kent Title Department Chair

Address College of Arts & Sciences

E-mail rkent@uakron.edu

Phone 330-972-7622

Fax 330-972-6080

Credit Hours 3 qtr _____ sem X

Lecture Hours 3

Laboratory Hours _____ (if applicable)

Pre-Requisites(s) Course work (if applicable)

Placement Score (if applicable)

(Name of test)

(Domain) (Score)

Catalog/Course Description (Includes Course Title and Course #)

310 PHYSICAL AND ENVIRONMENTAL GEOGRAPHY
Landforms, weather and climate, soils and vegetation and natural hazards.
Nature and distribution of these environmental elements and their
significance to society. Laboratory

Texts/Outside Readings/Ancillary Materials

Elemental Geosystems (4th Ed.) by Robert Christopherson

Course Objectives and/or Plan of Work

Physical and Environmental Geography provides an overview of the field of physical geography, which examines and investigates natural phenomena spatially. In order to study spatial aspects of these phenomena, however, we will also examine the relationships between these phenomena and human activities.

Description of Assessment and/or Evaluation of Student Learning

Attendance/Participation: 100 pts.
WebCT Quizzes: 100 pts.
Exercises (in-class and homework): about 150 pts.
Exams 1,2, and 3: 450 pts. (each exam 150 pts.)
Final Exam 4: 200 pts.

Master Syllabi and Working Syllabi (if both are used)

See attached syllabi.

Additional Documentation

OBR Use

Action

Approved	
Additional Information Requested	
Rejected	
Date	

3350:310-001
Spring Semester 2006
Dr. Linda R. Barrett

405 Arts & Sciences
330-972-6120
barrett@uakron.edu
Office Hours: Mon, Wed, Friday from 9:55 - 10:45

Course Description

Physical and Environmental Geography provides an overview of the field of physical geography, which examines and investigates natural phenomena spatially. In order to study spatial aspects of these phenomena, however, we will also need to become acquainted with the physical principles involved. We will also examine the interrelationships between these phenomena and human activities.

In this country, most students come to the university with only a rudimentary background in geography. Many students have not had a geography course since grade school. Students are often surprised, therefore, to find that the geography they encounter in Physical and Environmental Geography is very different from the geography they are familiar with. In the lower grades, geography often consists of memorizing place names and terminology. Geography in higher education, however, requires students to go beyond simply knowing place names. In each of the situations we analyze this semester, the process will begin by asking Where? questions, and then the related Why there? questions.

Textbook

The textbook for this course is Elemental Geosystems (4th ed.) by Robert W. Christopherson. This book is accompanied by a CD-ROM that contains animations and graphics that will be helpful in understanding the course material. Having access to the textbook is necessary in order to do well in this course, but the CD-ROM is not absolutely essential.

You must buy this textbook as soon as possible after the beginning of the semester! The WebCT quizzes (see below) are based on material covered in the textbook.

WebCT

We will be using WebCT extensively in this course. To access the WebCT site, go to this URL with your web browser:
<http://webct.uakron.edu>, and log in at the login prompt using your UAnet user ID and password. Some of the material I post on WebCT will require you to use the free Adobe Acrobat Reader. You can download this from <http://www.adobe.com>.

You should plan on visiting the WebCT site regularly. We will use the calendar and mail functions frequently. Lecture

notes, study guides, "quizzes", reading assignments, and student grades will be posted on WebCT. Some homework activities may also require WebCT. The WebCT site provides distinct benefits to the student by making available a wider variety of resources than I would otherwise be able to provide. It also provides a convenient method of interaction between the instructor and the students. Please take advantage of this important resource.

"Clickers"

We will be making extensive use of "clicker" technology in this class beginning on Wednesday, January 25. You must buy and register your clicker by that date, and bring it with you to class every class meeting following that. The clickers are used to take attendance. They will also be used to measure class participation. The clickers provide feedback for both the student and the instructor about the level of understanding of course concepts.

You can buy your clicker at the bookstore, or use one that you used in a previous semester. Before using it in this class, you will need to register your clicker online, using the following instructions. You will need two pieces of information:

the Class Key for this class : K15428M722, and the number from your clicker, which is found inside the battery compartment.

Instructions for enrolling:

1. Go to www.einstruction.com
2. Click on the "Students" at the top of the window.
3. Select the University of Akron from the drop-down menu.
4. Click "Create your account" next to the Submit button.
5. Enter your information in the boxes provided. You may want to include your email address so that you can receive an email from eInstruction reminding you of your username and password.
6. Click Submit. You will be asked if you would like to enroll in a class now.
7. Click Yes to enroll.
8. Enter your Class Key in the space provided. The Class Key for this class is: K15428M722.
9. You do NOT need a code.
10. Once you have finished enrolling in all of your classes, click Log Out. Do not simply close the window.

Attendance/Participation points

The clickers will be used to take attendance in many of our class meetings. The attendance points for the course will be calculated as the percentage of class meetings in which attendance was taken, with a three class "grace period" (i.e., you can miss up to three of these classes and still receive the total number of attendance points).

In-class activities and homework

You can expect to receive regular homework assignments. I will usually post homework assignments on the WebCT site. You will find assignments posted on the WebCT calendar, listed on the due date. All assignments are due at the beginning of class on the due date. Our class meetings will include frequent in-class activities. Some of these activities will be done individually, and some will require group work.

Reading assignments and WebCT "quizzes"

Students are required to take "quizzes" through the WebCT site on a regular basis. The quizzes are based on the textbook chapters. Even though they are called "quizzes", they are open book (but that does not mean that they are easy). Quizzes will become available when we first begin covering the material associated with the textbook chapter in class. The deadline for completing the quizzes is the date of the exam over the relevant unit. I suggest keeping up with taking the quizzes as we cover the material from the textbook chapters in class. In any case, you should do the quizzes well before the deadline in case you run into computer problems.

You may take each quiz twice before the deadline, with 24 hours separating each attempt. Only the highest score will be recorded from the two attempts. You may print out the quiz questions if you wish to keep a record of them.

Lecture notes

The PowerPoint slides accompanying any lectures that are given in class will be posted on the WebCT site. These should not be used as a substitute for taking your own notes in class, but they are available if you have been absent. You should note that the PowerPoint slides generally only contain graphical material (photos, graphs, etc.) from my lectures, not the text. The text will be added "live" in the classroom. Some students find it convenient to aid in their own note taking by printing out a copy of the notes prior to attending a lecture. I try to post the lecture notes at least a day or two before a class meeting.

Exams

Exams will be given on the following dates:

- February 13
- March 10
- April 12
- May 12 (10:00 - 11:55)

The fourth (final) exam is longer than the other exams, and it is comprehensive. Material from both the lecture and the text will be covered on all exams.

How will your course grade be determined?

Your course grade will be calculated from the totals of points from the various assignments. There will be a total of 1000 points in the class. The following is the approximate breakdown of how points will be distributed:

- Attendance/Participation: 100 points
- WebCT quizzes: 100 points.
- Exercises (in-class and homework): about 150 points.
- Exams 1, 2, and 3: 450 points total (each exam worth 150 points)
- Final Exam (a.k.a. Exam 4): 200 points.

I will assign grades based on this composite score according to the following scale. Intermediate grades (+ and -) will be at the top and bottom of these ranges, respectively. I reserve the right to modify this scale, usually in your favor, as necessary to reflect the performance of this class as a whole.

Grade Points

A	900 - 1000
B	800 -900
C	700 -800
D	600 -700
F	Below 600

How to get in contact with me

I welcome the chance to hear your opinions and to answer your questions. Please take advantage of the posted office hours, or make an appointment to see me. You are also welcome to "drop by" my office (405 Arts & Sciences). If I am in, my door is always open.

If you prefer, I am also available by telephone (330-972-6120). Leave a voice mail message if I am not in, and I will get back to you. I also welcome email messages. You may send me a message using the WebCT email facility. Outside of WebCT, my email address is barrett@uakron.edu. If you use WebCT's email, I will answer using WebCT's email. If you use my regular email address, I will answer to whatever address you send it from.

Plagiarism and Academic Integrity

Submitting plagiarized work for an academic requirement is a violation of the university's Student Code of Conduct (<http://www3.uakron.edu/studdev/AcademicIntegrity.pdf>). Plagiarism is "using others' ideas and words without clearly acknowledging the source of that information" (<http://www.indiana.edu/~wts/wts/plagiarism.html>). This includes material from any written sources, including material from the web. Please be sure to cite the sources of ideas as well as direct quotations in any work you do for this class.

In the body of the text, citations should be in the form of the author's (or authors') last name and the year of publication placed in parentheses in this manner: (Smith 2002) or (Jones and Smith 1992). Please follow the Chicago Style in your list of references cited, as described at this web site: <http://www3.uakron.edu/library/gateway/subjects/music/citchi.html>.

Some students may not realize that their writing practices constitute plagiarism. The following web sites contain information that is useful in recognizing and avoiding plagiarism:

- <http://www.indiana.edu/~wts/wts/plagiarism.html>
- <http://sja.ucdavis.edu/avoid.htm>
- <http://www.writing.nwu.edu/tips/plag.html>

I expect all students to maintain high standards of academic integrity. If I encounter an instance of academic dishonesty, I will follow university policy in dealing with it. Penalties for academic dishonesty can include suspension or dismissal from the university.

Course Outline -- 3350:310, Spring 2006

Day Date Topic Concepts Text Week

W 18-Jan Introduction Ch. 1

1

Latitude, longitude, parallel, meridian, equator, axis

F 20-Jan Coordinates of rotation, great circle, small circle, Prime Ch. 1; 13-20

Meridian, standard time zones

M 23-Jan Maps Map scale, map projections, remote sensing, GIS Ch. 1; 20-28

2W 25-Jan Earth/Sun

Solar system, perihelion, aphelion, electromagnetic spectrum, insolation, solar constant, seasons and seasonality, solstice, equinox

Ch. 2; 38-47

F 27-Jan Air Temperature

Radiation, transmission, albedo, reflection, absorption, conduction, convection, advection, radiation balance

Ch. 3; 72-85

M 30-Jan

Air Temperature

Patterns

Temperature controls, specific heat, land/water differences, marine effect and continentality, global temperature patterns, urban heat island

Ch. 3; 85-97

3W 1-Feb

Air Pressure and

Winds

Air pressure, pressure gradient force, coriolis force, Ch. 4; 107-112

F 3-Feb

Global and Local

Wind Patterns

global wind patterns, Hadley cells, jet streams, local winds Ch. 4; 113-126

Course Outline -- 3350:310, Spring 2006

Day Date Topic Concepts Text Week

M 6-Feb

Humidity and

Adiabatic

Processes

Humidity, relative humidity, water vapor capacity, dew point temperature, specific humidity, lapse rate, dry adiabatic rate, moist adiabatic rate, stable and unstable atmospheric conditions

Ch. 5; 140-147

4W 8-Feb

Precipitation and

Precipitation

Patterns

Clouds, condensation nuclei, convective lifting, orographic lifting, rain shadow, frontal lifting, Midlatitude cyclone;

Ch. 5; 147-162

F 10-Feb Review

M 13-Feb Exam 1

5W 15-Feb Climate Global wind patterns and relationship to climate patterns (departure from textbook) Ch. 6; 180-207

F 17-Feb Climate continued Ch. 6; 180-207

M 20-Feb Climate Change paleoclimatology and past climates; also geologic time scale

Ch. 6; 208-210;

and Ch. 8; 250-251

6W 22-Feb Climate Change carbon dioxide, methane, greenhouse gases, global

warming Ch. 6; 210-216

Course Outline -- 3350:310, Spring 2006

Day Date Topic Concepts Text Week

F 24-Feb Earth Structure

Earth's internal structure; core, mantle, asthenosphere, Moho, lithosphere, crust, continental crust, oceanic crust;

Ch. 8; 252-255

M 27-Feb Rock Cycle rock cycle, sedimentary, igneous, metamorphic rocks Ch. 8; 255-262

7W 1-Mar Plate Tectonics

plate tectonics, subduction, mid ocean ridge;

Divergent, convergent, and transform plate boundaries; island arcs, subduction zone; hot spots

Ch. 8; 262-271

F 3-Mar Crustal Deformation tension, compression, shear, strain, folding,

faulting, anticline, syncline; Ch. 9; 283-290

M 6-Mar
Earthquake Damage
and Effects
Earthquake, epicenter, focus Ch. 9; 296-300
8W 8-Mar Review AAG meeting
F 10-Mar Exam 2 AAG meeting
M 13-Mar Vulcanism Lava, tephra, magma Ch. 9; 301-303

Course Outline -- 3350:310, Spring 2006

Day Date Topic Concepts Text Week
W 15-Mar
Types of volcanic
activity
Effusive eruption, explosive eruption, shield
volcano, cinder cone, caldera, composite volcano,
stratovolcano
Ch. 9; 303-310 9
F 17-Mar Volcanoes continued Ch. 9
M 20-Mar Weathering
weathering, bedrock, physical weathering,
mechanical weathering, frost action, crystallization,
chemical weathering, hydrolysis, oxidation
Ch. 10; 319-324
10W 22-Mar Karst Carbonation, karst, sinkhole, cave, cavern,
stalactite, stalagmite Ch. 10; 324-329
F 24-Mar Mass Movement mass movement, angle of repose, gravity, fall,
slide, flow, creep Ch. 10; 330-336
spring break
M 3-Apr Soil properties Soil, pedon, horizon, organic matter,
eluviation,
illuviation, texture, sand, silt, clay Ch. 15; 457-461
11W 5-Apr Soil chemistry cation exchange capacity, acidity, alkalinity,
pH Ch. 15; 462-463

Course Outline -- 3350:310, Spring 2006

Day Date Topic Concepts Text Week
F 7-Apr Soil surveys Ch. 15
M 10-Apr Review
12W 12-Apr Exam 3
F 14-Apr Fluvial processes Fluvial, erosion, deposition, alluvium, base
level,
drainage basin, drainage divide, watershed Ch. 11; 344-350
M 17-Apr Fluvial landforms
Discharge, hydraulic action, abrasion, load,
dissolved load, suspended load, bed load, braided
stream, meandering stream, undercut bank, point
bar, meander, floodplain, oxbow lake, delta,
nickpoint, gradient
Ch. 11; 350-360
13W 19-Apr Floods Flood, streamflow measurement, hydrograph, base
flow, lag time Ch. 11; 360-368
F 21-Apr Glacial processes glacier, alpine glacier, continental
glacier, firn,

ablation, equilibrium line, abrasion, plucking Ch. 14; 426-233
M 24-Apr Glacial landforms
arete, u-shaped valley, horn, tarn, hanging valley,
glacial drift, till, stratified drift, moraine, ground
moraine, till plain, outwash plane, esker, kettle,
kame, drumlin
Ch. 14; 434-442

Course Outline -- 3350:310, Spring 2006

Day Date Topic Concepts Text Week
W 26-Apr The Pleistocene
ice age, Pleistocene, interglacial, Winconsinan,
Illinoian, pluvial, Medieval Warm Period, Little Ice
Age, Milankovich cycles
Ch. 14; 442-448 14
F 28-Apr
The Carbon Cycle
and NPP
habitat, photosynthesis, net primary productivity,
carbon cycle, limiting factor, food chain, food web,
producer, consumer, decomposer
Ch. 16; 484-496
M 1-May
Ecological
Succession
ecological succession, climax community, primary
succession, secondary succession, pioneer
community, fire ecology
Ch. 16; 496-505
15W 3-May
Biogeography/
Biomes
biome, ecotone, rain forest, savanna, desert,
grassland, tundra Ch. 16; 505-521
F 5-May Review
F 12-May Final Exam 10:00 - 11:55