The University of Oklahoma  
College of Continuing Education  
Advanced Programs – Course Syllabus

Course Title:  
Seminar in Resource and Environmental Geography: Large-Scale Ecosystem Restoration

Course Number:  
GEOG 6240-101

Course Description:  
Humans have damaged the health of ecosystems on a massive scale and are now faced with the challenge of rehabilitating these ecosystems in order to restore their integrity and sustainability. This course examines the efforts to restore ecosystems at large scales, those that encompass multiple regions. We will use five noteworthy large-scale projects in the United States to focus our discussions and investigate the scientific, sociopolitical, and economic merits of each case study. Lessons learned from these domestic examples will then be used to evaluate a few international ecosystem restoration projects.

Class Dates, Location and Hours:  
Dates: December 2-4 & 9-11, 2011  
Location: 3281 Sheridan Road, Fort Sill, Oklahoma.  
Hours: Fri 5:30-9:00 p.m., Sat 9:00 a.m.-5:00 p.m.; Sun 12:00-4:00 p.m.  
Last day to enroll or drop without penalty: November 3, 2011

Site Director:  
Tamara Sutteer. Assistant: Anita Bailey. Phone: 580-355-1974; Fax: 580-351-9674; E-mail: apftsill@ou.edu

Professor Contact Information:  
Course Professor: Jason P. Julian, Ph.D.  
Mailing Address: 100 E. Boyd St.  
Department of Geography, SEC 684  
University of Oklahoma  
Norman, OK 73019  
Telephone Number: (405) 325-9862  
Fax Number: (405) 325-6090  
E-mail Address: jjulian@ou.edu  
Professor availability: The professor will be available via e-mail to students before and after the class sessions. On-site office hours are half an hour before and after each class session, by appointment.

Textbook(s) and Instructional Materials:  
Student materials are available at the Follett/AP Bookstore located in the Oklahoma Memorial Union, 900 Asp Ave., Norman, OK. Orders can be placed online at www.oklahomaunion.bkstr.com or by telephone at 866-369-9713 (toll free in the U.S.) or 405-325-5960 (outside the U.S.). E-mail orders may be sent to oklahomaunion@bkstr.com. Representatives are available from 8 a.m. to 6 p.m. CST Monday through Thursday and 8 a.m. to 5 p.m. CST on Friday. Summer hours: 8 a.m. to 4 p.m. CST. Faxed orders may be placed 24 hours a day to 866-223-5607 (toll free in the U.S.) or 405-325-1557 (outside the U.S.).

Materials posted on the OU Desire to Learn (D2L) system: Access D2L at [http://learn.ou.edu](http://learn.ou.edu); enter your OU NetID (4+4) and password, and select course to access material. Please contact your local Site Director if you require assistance.

Note: The Follett/AP Bookstore is the Advanced Programs contractual textbook provider. Should text changes become necessary after publication of the course syllabus, Advanced Programs will facilitate text returns/refunds only for texts purchased through the Follett/AP Bookstore.

**Course Objectives:**

There are many challenges associated with restoring ecosystems at large-scales. Because of the newness of this integrative science, we have to rely on adaptive ecosystem management to make the projects scientifically feasible. Because of the large area on which these projects take place, the sociopolitics that must be worked out in order for the project to succeed are complicated and usually involve legal battles. Because of the numerous agencies and stakeholders involved, the dollar costs for these projects reach into the billions. When combined, these challenges constrain the ability for success of these large-scale restorations. The objectives of this course therefore are to:

- First, understand why these large-scale ecosystem restorations are necessary
- Identify the challenges involved in the process
- Develop explanations for the successes and failures of each project
- Identify ecosystem restoration potential in other nations across the globe

**Course Outline:**

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic</th>
<th>Pre-class Book Reading (pp.)</th>
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<tbody>
<tr>
<td>Friday Dec 2</td>
<td>Intro to Ecosystem Restoration</td>
<td>Introduction</td>
</tr>
<tr>
<td></td>
<td>Case studies</td>
<td>Part I. The Everglades (1-54)</td>
</tr>
<tr>
<td></td>
<td>Everglades</td>
<td></td>
</tr>
<tr>
<td>Saturday Dec 3</td>
<td>Local Restoration/Conservation Site(s) Visit</td>
<td>None</td>
</tr>
<tr>
<td>Sunday Dec 4</td>
<td>Platte River</td>
<td>Part II. The Platte River (55-108)</td>
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<tr>
<td></td>
<td>California Bay-Delta</td>
<td>Part III. The California Bay-Delta (109-170)</td>
</tr>
<tr>
<td>Friday Dec 9</td>
<td>Chesapeake Bay</td>
<td>Part IV. The Chesapeake Bay (171-224)</td>
</tr>
<tr>
<td></td>
<td>Upper Mississippi</td>
<td>Part V. The Upper Mississippi (225-290)</td>
</tr>
<tr>
<td>Saturday Dec 10</td>
<td>International Case Studies Course Review</td>
<td>Conclusion (291-300)</td>
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<tr>
<td></td>
<td></td>
<td>Articles on D2L</td>
</tr>
<tr>
<td>Sunday Dec 11</td>
<td>Final Exam</td>
<td>None</td>
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**Assignments, Grading and Due Dates:**

Assignments 1 and 2 will be essays that address topics relevant to the readings and our discussions in class. The topics for these essays will be posted to learn.ou.edu at least one month before class. The expected length of these essays is 4-6 double-spaced pages, not including diagrams or bibliography.

Final Exam (last day of class): The format will be multiple short-essay questions that cover everything we discussed in the course.

Assignment 3 (Due two weeks after class): This final essay will be your opportunity to use the information learned in class to discuss the potential of a large-scale international ecosystem restoration in any region of your choice. In this essay, you can draw on examples from the case-studies discussed in class, but it will be necessary to use outside sources to complete your discussion. The maximum length of this essay is 12 double-spaced pages, not including diagrams or bibliography. This final essay can be done individually or in groups (no more than 3 individuals per group). More details on this assignment will be provided on the first day of class.
All essays will be graded on the following:

(i) Comprehensiveness and accuracy of information presented.
(ii) Clarity of logic and expression.
(iii) Feasibility of solutions or scenarios proposed.
(iv) Synthesis: ability to demonstrate linkages among interrelated ideas and concepts.

Grading: This is a letter-graded course: A, B, C, D, or F. The course will be graded as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
<th>Percent of grade</th>
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<tbody>
<tr>
<td>Class discussions participation</td>
<td>Dec 3</td>
<td>5%</td>
</tr>
<tr>
<td>Field Trip Participation</td>
<td>Dec 3</td>
<td>5%</td>
</tr>
<tr>
<td>Assignment 1</td>
<td>Dec 4</td>
<td>15%</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>Dec 7</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Dec 11</td>
<td>35%</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>Dec 25</td>
<td>25%</td>
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NOTICE: Failure to meet assignment due dates could result in a grade of I (Incomplete) and may adversely impact Tuition Assistance and/or Financial Aid.
POLICIES AND NOTICES

Attendance/Grade Policy

Attendance and participation in interaction, individual assignments, group exercises, simulations, role playing, etc. are valuable aspects of any course because much of the learning comes from discussions in class with other students. It is expected that you attend all classes and be on time except for excused emergencies.

Excused absences are given for professor mandated activities or legally required activities such as emergencies or military assignments. Unavoidable personal emergencies, including (but not limited to) serious illness; delays in getting to class because of accidents, etc.; deaths and funerals, and hazardous road conditions will be excused.

If you are obtaining financial assistance (TA, STAP, FA, VA, Scholarship, etc.) to pay all or part of your tuition cost, you must follow your funding agency/institution’s policy regarding “I” (Incomplete) grades unless the timeline is longer than what the University policy allows then you must adhere to the University policy.

Students who receive Financial Aid must resolve/complete any “I” (Incomplete) grades by the end of the term or he/she may be placed on “financial aid probation.” If the “I” grade is not resolved/completed by the end of the following term, the student’s Financial Aid may be suspended make the student ineligible for further Financial Aid.

Students are responsible for meeting the guidelines of Tuition Assistance and Veterans Assistance. See the education counselor at your local education center for a complete description of your TA or VA requirements.

Academic Honesty

Honesty is a fundamental precept in all academic activities and … [you] have a special obligation to observe the highest standards of honesty. Academic misconduct in any form is inimical to the purposes and functions of the University and is therefore unacceptable and is rigorously proscribed. Academic misconduct includes:

- cheating (using unauthorized materials, information, or study aids in any academic exercise), plagiarism, falsification of records, unauthorized possession of examinations, intimidation, and any and all other actions that may improperly affect the evaluation of a student’s academic performance or achievement; assisting others in any such act; or attempting to engage in such acts.

All acts of academic misconduct will be reported and adjudicated as prescribed by the student code of the University of Oklahoma. All students should review the “Student’s Guide to Academic Integrity” found at http://www.ou.edu/provost/integrity

Accommodation Statement

The College of Continuing Education [Advanced Programs] is committed to making its activities as accessible as possible. For accommodations on the basis of disability, please contact your OU Site Director.

Course Policies

Advanced Programs policy is to order books in paperback if available. Courses, dates, and professors are subject to change. Please check with your OU Site Director. Students should retain a copy of any assignments that are mailed to the professor for the course.

Copyright

Any and all course materials, syllabus, lessons, lectures, etc. are the property of professor teaching the course and the Board of Regents of the University of Oklahoma and are protected under applicable copyright.

For more information about Advanced Programs, visit our website at: http://www.goou.ou.edu/
INSTRUCTOR VITA

Jason P. Julian, Ph.D.

Education

- Ph.D. Geography, University of North Carolina, Chapel Hill, NC
- M.S. Geology, University of South Carolina, Columbia, SC
- B.S. Geography, University of South Carolina, Columbia, SC

Current Positions

Assistant Professor of Geography, University of Oklahoma

Frequently Taught Advanced Programs Courses

- GEOG 6240 Seminar in Resource & Environmental Geography
- GEOG 5113 Research Methods

Major Areas of Teaching and Research Interest

- Earth Systems Science: hydrologic and geomorphic controls on ecosystem processes; basin-scale GIS models; water resource management
- Fluvial Geomorphology: sediment erosion; suspended sediment transport; channel evolution
- Ecohydrology: light availability in aquatic ecosystems; spatiotemporal trends in water quality; biogeochemical responses to flow variability and watershed disturbances; watershed restoration
- Landscape Ecology: basin-scale responses to land-use and climate change; ecosystem process scaling relationships

Representative Publications and Presentations


Representative Honors and Awards Received

- Fulbright Senior Scholar Award for New Zealand (2012)
- Delegate for Meeting of Young Researchers in Earth Sciences (2008)
- Department of Geological Sciences Fellowship (2002), Univ. of South Carolina
- Julian J. Petty Award for top graduate in Geography Department (2002), Univ. of South Carolina
- Magna cum laude (2001), Univ. of South Carolina
Major Professional Affiliations

- Association of American Geographers (Geomorphology, Water Resources)
- American Geophysical Union (Hydrology)
- Ecological Society of America (Biogeosciences)
- North American Benthological Society (Environmental Impact/Assessment)