**GEA4275 – RI: Human-Environment Interactions in South Florida**

**Spring 2017, section 001, 3 credit hours**

**Tobin Hindle, Ph.D.**

Department of Geosciences

Charles E. Schmidt College of Science

Office: SE 462, Science Bldg.

Tel: 561-297-2846; Fax: 561-297-2745

Email: [thindle@fau.edu](mailto:thindle@fau.edu)

Office Hours: Wed. 10am-12pm

**Course format:** FullyOnline

**Pre-requisites:** Principles of Geographic Information Systems (GIS 4043c) with final grade of C or Better.

**Permission of Instructor:** No

**Course Logistics:** This is a fully on-line, asynchronous course utilizing FAU’s Blackboard eLearning system located at <http://blackboard.fau.edu> , and it is not necessary to visit the FAU campus to complete the course. Reliable computer access with a broadband Internet connection is required.

**Intended Audience:** GEO 4275 is the research intensive capstone course designed for students in all tracks of Geography to apply methods and approaches learned in previous Geosciences courses to a variety of human-environmental interactions. Additionally this course is well suited for upper level students from related fields (e.g., environmental studies, planning, etc.) who desire to explore human-environmental interactions from a geography viewpoint.

**Course Description:** This course is for Geography majors and majors in other related fields. Methods covered in previous Geosciences courses are emphasized in a collaborative learning environment. Critical and systematic thinking skills are used in a series of case-study projects.

**Textbook and course materials:** Classic Edition Sources: Environmental Studies, 5th Edition, by Thomas Easton (McGraw Hill, 2014) and Humans in the Landscape: An Introduction to Environmental Studies, by Kai Lee, et al (W.W. Norton & Company, 2013). Additional course materials such as syllabus, schedules, announcements, lecture notes, class assignments, and multimedia resources will be made available in class or through FAU’s Blackboard system.

**Strategy**: The course will utilize online presentations, readings, article reviews and case studies in an individual and collaborative learning in a manner where the instructor and students share responsibility for the learning process. Students will benefit from the collective knowledge, skills, insights, and efforts of each other. Students will take part in an Academic Service-Learning project and complete a relevant research project illustrating their understanding of scientific and geographic methods. These projects will include a poster presentation in a public academic venue.

**Course objectives:** Students successfully completing GEA 4275 will compare a variety of scientific processes and thought that occur through the interactions of the human and environmental systems. In doing so, students will be able to:

* Describe how environmental problems are caused by human activity
* Analyze the concepts of the Wilderness Idea and pristine nature
* Explain how social constructions of nature have guided the development of American environmentalism
* Evaluate human impact on biodiversity and ecosystem services of major south Florida ecosystems
* Analyze environmental degradation through the lens of *Common* resources exploitation.
* Describe the concept of sustainable development and its relationship to long-term prospects for human civilization
* Examine to role of anthropogenic impact in global climate change

Students will develop their research skills, knowledge in interdisciplinary learning, written communication and critical thinking, as well as apply approaches/methodologies/techniques learned in previous, related classes.

**Research intensive designated course statement:** This course contains an assignment or multiple assignments designed to help students conduct research and inquiry at an intensive level.  If this class is selected to participate in the university-wide assessment program, students will be asked to complete a consent form and submit electronically some of their research assignments for review.  Visit the Office of Undergraduate Research and Inquiry (OURI) for additional opportunities and information at <http://www.fau.edu/ouri>.

**Florida Atlantic University's Undergraduate Research Symposium:** You are encouraged to submit the final research project to the Undergraduate Research Symposium held at Florida Atlantic University (Boca Raton campus) each Spring Semester. Use the following link for information: [http://www.fau.edu/ouri/undergrad symposium.php](http://www.fau.edu/ouri/undergrad%20symposium.php)

**Academic Service-Learning Statement:**

Due to the nature of the course content, this course is designated as an “academic service-learning” course. The assistance you provide to the agency/organization during your academic service-learning experience is a service to the community and will allow you to apply knowledge from the course to local, national, and/or global social issues. Throughout this course you will be participating in academic service-learning activities while demonstrating civic engagement at campus, local, national, and/or global community levels. You will also reflect on your academic service-learning experience and the impact on the community as well as your professional development.

To receive academic service-learning notation of hours on your transcript, your hours must be logged electronically through NobleHour, [www.noblehour.com](http://www.noblehour.com), while completing your academic service-learning project. Also, pre-assessment and post-assessment surveys are required to be taken by academic service-learning students. Please visit the Weppner Center for Service-Learning & Civic Responsibility website, [www.fau.edu/volunteer](http://www.fau.edu/volunteer), for instructions on how to log hours through NobleHour and the links for the surveys. Once your hours have been approved and both surveys have been completed, you will receive an academic service-learning notation on your transcript.

**Graded Requirements:**

1. **Discussion Board (20%)**: Each student will be expected to actively participate in all class discussions.
2. **Case Studies (15%)**: There will be three case study assignments using spatial techniques to evaluate the outcome.
3. **Article Reviews (15%):** There will be three article reviews of relevant, peer reviewed journal articles.
4. **Academic Service-Learning (AS-L) project (20%)**: Each student will identify an agency/organization to complete a 15 hour AS-L experience providing service to the community and allowing you to apply knowledge from this course to a local, national, and/or global human-environmental issue. Students will complete a 2-3 page written reflection of their A S-L experience and well as a class oral presentation. This assignment may be done in small groups but should be relevant to your individual class research paper.
5. **Research Project (30%)**: Each student will carry out an **original** research project on a scientific question dealing with human-environmental interactions and then present his/her research through a digital poster\* at the end of the semester. The project topic will be chosen by the student and approved by the instructor.

**\* Students are encouraged to present their research at the FAU Undergraduate Research symposium**

**Grade postings:** Scores are listed in Blackboard under ***My Grades***.

**The grade scale is set as below, with scores rounded to the nearest whole percent:**

**Percent Avg. Grade Percent Avg. Grade**

**93 - 100 A 73 - 76 C 90 - 92 A- 70 - 72 C- 87 - 89 B+ 67 - 69 D+ 83 - 86 B 63 - 66 D 80 - 82 B- 60 - 62 D- 77 - 79 C+ 0 - 59 F**

**Academic integrity:** Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty, including cheating and plagiarism, is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the University 6 community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001 at <http://www.fau.edu/ctl/4.001_Code_of_Academic_Integrity.pdf>

**Policy on make-ups:**  If you miss an assignment, you lose credit for it unless you can provide the instructor with *written* documentation of a medical or family emergency. If you know that you can’t take an assignment beforehand, be sure to contact the instructor to see if it can be administered at a different time or date. .

**The “incomplete” grade:** The grade of I (incomplete) shall ONLY be given for the reasons listed and under the conditions specified in the FAU course catalog, <http://www.fau.edu/academic/registrar/catalog/academics.php> .

**Electronic mail** is a critical communication tool in any web-based college course! Please note that this course conforms to the FAU student email policy. All course-related email will be sent to your FAU email account. If you want to forward your FAU email to a different account, you can set this up within your myFAU account. All students must regularly (at least three times weekly) access their electronic mail accounts, as well as Blackboard for announcements and scheduling information! You can normally expect all emails to the instructor to be replied to within 48 hours.

**Course etiquette:** As this is a fully online course, students must use good netiquette, which is proper or polite behavior on the internet. How we communicate to each other is very important in this course. In order to maintain a positive online environment for our class, we all need to follow the netiquette guidelines: Show respect for the instructor and for other students in the class; Respect the privacy of other students. (no spamming student emails); Express differences of opinion in a polite and rational way; Avoid bringing up irrelevant topics when involved in group discussions; Use mainly lowercase in their messages with proper capitalization rules followed (use of all uppercase in a message is the equivalent of shouting and is considered offensive; Use appropriate language in messages that are conversational and positive in nature and not threatening or offensive

**Special accommodations:** Athletes competing in sports this semester should be certain that their academic advisor is aware of the course assignment schedule and contacts the instructor as soon as possible if there are conflicts. Since all assignments can be completed online from any Internet connected computer, extensions are not generally provided for “away” games and competitions.

**Students with disabilities:** In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS)—in Boca Raton, SU 133 (561-297-3880); in Davie, LA 131 (954-236-1222); or in Jupiter, SR 111F (561-799-8585)

**Class Schedule**

**Week 1: Introduction, review syllabus, discuss AS-L and Research Projects**.

Readings:Chapter One in Humans in the Landscape

Assignments: Discussion forum – Introductions/research interests

**Part 1: Humans in the Landscape**

**Week 2: Nature and the Wilderness**

Readings Humans in the Landscape: *Chapter Two*; Environmental Studies: *Man and Nature;*  Posted in BB:  *The Trouble with Wilderness, Taming the Wilderness Myth*

Assignments: Discussion forum - reading analysis,

Discussion forum - Research Question and AS-L ideas

**Week 3: Generating research ideas and questions; potential A S-L opportunities**

Readings: Environmental Studies: Captive Wilderness; Posted on BB: *Attitudes toward wilderness study areas: A survey of six southeastern Utah counties,*

Activity: Library Research, Lib Guide exploration

Assignments: 1st Article Review

Final Research Question and AS-L

**Week 4: American Environmentalism**

Readings: Humans in the Landscape: *Chapter 11*; Environmental Studies:

*Principles of Conservation, Sierra Club vs. Morton, A Sand County Almanac, The Ethics of Respect for Nature;* Posted on BB: *Hetch Hetchy Valley*

Assignments: 1st Case Study: Timber Harvest Planning Using GIS

Completion of selected Responsible Conduct of Research (RCR) online modules at the Collaborative Institutional Training Initiative (CITI Program)

**Week 5: Research Project Proposal**

Readings: Posted on BB: On the Eve of Destruction

Assignment: Discussion forum - reading analysis

submit 2-3 page research proposal project

**Part 2: The Landscape in Society**

**Week 6:** **Ecosystems**

Readings: Humans in the Landscape*: Chapter 5 and 6;* Environmental Studies: *Human Domination of the Earth’s Ecosystems, Ecosystems and Human Well-being, Will Limited Land, Water and Energy Control Human Population*

Assignment: 2nd Article Review

**Week 7:** **Biodiversity and** **AS-L**

Readings: Humans in the Landscape*: Chapter 9;* Environmental Studies: *Secretariat of the Convention on Biological Diversity, Ecosystem Overfishing in the Ocean*

Activity: Natural area field trip

Assignment: Discussion forum - Field trip/reading analysis

AS-L update

**Week 8:** **Environmental Degradation**

Readings: Humans in the Landscape: *Chapter 3;* Environmental Studies: Prehistoric Overkill, The Tragedy of the Commons, Peculiarities of a Prodigal Century, Fracking Nation, The Heaving Planet

Assignment: 2nd case study: Assessing Point Groundwater Contamination Potential: The Floridan Aquifer

**Week 9: Environmental Degradation**

Readings: Humans in the Landscape: *Chapter 8 and 12;* Environmental Studies: *On the Cusp of Global Collapse, Could Food Shortages Bring Down Civilization, Environmental Justice for All, Global Biodiversity Conservation, Restoring Rivers*

Assignment: Discussion forum - reading analysis

**Week 10: Research Project**

Readings: Humans in the Landscape: Chapter 12

Assignment: Research Data and Methods due

AS-L update

**Part 3: Grand Challenges**

**Week 11: Sustainability**

Readings: Humans in the Landscape: *Chapters 10 and 13;* Environmental Studies: *Towards Sustainable Development, Putting a Value on Nature’s “Free” Services, Radically Rethinking Agriculture for the 21st Century, Organic Agriculture*

Assignment: Discussion forum - reading analysis

3rd Article Review

**Week 12: Sustainability**

Readings: Humans in the Landscape: *Chapters 14 and 15;* Environmental Studies: *Energy and the Environment, Energy as a Master Resource, A Path to Sustainable Energy by 2030*

Assignment: Discussion forum - Green Buildings

Attend FAU undergraduate Symposium (March 31st)

**Week 13: Global Climate Changes**

Readings: Humans in the Landscape: *Chapter 7;* Environmental Studies: *Climate Change 2007, Redrawing the Energy-Climate Map*

Assignment: Discussion forum - reading analysis

Submit 2-3 page summary of research project results

**Week 14: Sea Level Rise**

Readings: Environmental Studies: *Storm of the Century, Environmental Lead after Hurricane Katrina*

Assignment: 3rd case study: What areas along the Gulf Coast of the United States are particularly vulnerable, physically and socially, to hurricanes? OR Impacts of Sea Level Rise and Storms on Manhattan

**Week 15: Research Poster and AS-L due**