**Geography 105 Nature and Society**

**Instructor: Michael S. McGlade, Ph.D.**

Class Location: BELL (HSS) 332 Class Meets: TR 10:00-11:50

Office: HSS 211 Phone (503) 838-8381

Office Hours: MW 11-12, T 12-2, 2:30-3:30 e-mail: mcgladm@mail.wou.edu

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This course fulfills part of the general education requirement in the Geography/Sustainability 105, 106, and 107 series. Please note that these courses can be taken in any order.

Required Readings & Books to Purchase:

Kolbert, Elizabeth (2014).The Sixth Extinction: An Unnatural History. New York: Henry Holt.

Montgomery, David & Bickle, Anne (2016). The Hidden Half of Nature. New York: WW Norton & Company.

There will also be PDFs available on Moodle when they are assigned, not from above books.

Course Description: We will study the various components of the natural environment, including the nature of the physical elements, the process involved in their development, their distribution over the earth, and their basic interrelationships. The relationships between nature and society are threads extending through much of the material.

Course Outcomes

\* Analyze interrelationships between humans and the environment (Inquiry & Analysis)

\* Students understand natural forces that affect/determine human existence such as climate, water resources, soil fertility, and geo-tectonic forces

\* Students understand climate change impacts, causes, and solutions

\* Students understand sustainability in a geographic framework of cultural, economic, and natural environments

Course Requirements: It is your responsibility to attend lectures and do the assigned readings. Exams will consist of mostly of multiple choice, short answer, and short essay questions. While we will generally use a computer generated outline in class, you should also write down the details of the lecture that are not in the class outlines. When in doubt, write it down! No make-up examinations will be given except in the most unusual of circumstances, and must be arranged prior to the exam being missed.

Pop quizzes (~5 pts. each) may be given without notice. Approximately four laboratory projects will be assigned. To avoid frustration, please do not attempt these until you have studied the reading and notes that pertain to them.

Approximate points possible (subject to change)

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| --- | --- |
| Activity | # points |
| 4 tests | 400 |
| labs | 200 |
| quizzes | 30 |
| total | 630 |

Grading scale is A: 90-100, B: 80-89, C: 70-79, D: 60-69, F < 60.

Plus and minus system used for upper and lower 2 percent.

**TENTATIVE SCHEDULE AND READINGS\***

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| Dates | Topic(s) | Reading/Viewing\* |
| Jan 7, 9 | Introduction to Nature, Society and Science; Planet Earth; Earth Sun Relationships | Kolbert, pp. 1-22 |
| Jan 14, 16 | Earth-Sun Relationships (cont.), Composition & Structure of Atmosphere, Atmospheric Radiation, Temperatures | Kolbert, pp. 23-69;Mann, Preface & Chapter 1 |
| **Jan 16** | **Lab Solar Altitude due** |  |
| **Jan 21** | **Exam 1 (class resumes at ~11:05)** |  |
| Jan 23, 28, 30,Feb 4 | Atmospheric Circulation, Moisture, Climate Change, Ocean Warming | Mann, Chapters 2-3; Lab Dawkins: How Scientists Date the Earth (pdf);[Earth an Operators Manual documentary viewing questions.docx](https://www.wou.edu/~mcgladm/Geography%20105%20%20Physical%20Geography/for%20exam%203/climate%20change/causation/Earth%20an%20Operators%20Manual%20documentary%20viewing%20questions.docx); Kolbert, 70-91 |
| **Feb 4** | **Lab *How Scientists Date the Earth* due** |  |
| February 6 | Ocean Warming  | Kolbert 92-110 |
| **Feb 11** | **Exam 2 (note that class resumes at 11:05)** |  |
| Feb 13 | Sea Level Rise | Kolbert 111-124, tba |
| Feb 18 | Ocean Acidification & Habitat Degradation | Kolbert 125-147, tba |
| **Feb 18** | **Lab *Sea Level Change* due** | Consult moodle for recent updates |
| Feb 20, 25 | Soil & Land Degradation | Montgomery & Bickle, tba |
| **Feb 27**  | **Exam 3 (class resumes at ~11:05)** |  |
| March 3, 5 | Soil Restoration, Species Extinction | Montgomery & Bickle, tba, Kolbert tba |
| **March 10** | **Lab *Land Use* due** |  |
| March 10, 12 | Scientific Explanation: Causal Mechanisms driving Climate Change, Accelerated Rates of Environmental Degradation & Species Extinction | Montgomery & Bickle, tba, Kolbert tba |
| **March 12** | **Lab Species Diversity and Extinction Due** |  |
| **Tuesday,** **March 17, 8-9:50 am** | **Exam 4 (finals week, not comprehensive)** |  |

\*other reading may be assigned; with Moodle being the final authority. Note that all subjects and activities are subject to modification.

Device Policy: no cell phones are to be used or visible while class is in session. Other devices such as laptops and tablets may be used for notetaking if they are not used in a way that distracts others (such as by viewing non-class related material). Any student using a cellphone will be asked to leave the classroom until finished. The second event may result in disenrollment or grade penalties.

Any student who feels that she or he may need an accommodation for any type of disability may talk me during office hours the first week of the course and should contact the Office of Disability Services (838-8250v/tty).

Academic dishonesty consists of representing the work of others as your own and/or using notes or other aids during an examination. Students who engage in such actions will receive no credit for the assignment or examination in question and will be subject to University discipline as outlined in the Code of Student Responsibility. If you have further questions, please consult the Social Science Division policy on academic dishonesty and the Code of Student Responsibility.