**Geography 105 Nature and Society**

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

Class Location: BELL (HSS) 111 Class Meets: TR 12:00-1:50

Office: HSS 211 Phone (503) 838-8381

Office Hours: MW 12-1, Thursday 10-12, F 10-11 online e-mail: mcgladm@mail.wou.edu

Course website: [www.wou.edu/~mcgladm](http://www.wou.edu/~mcgladm)

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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:

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

There will be a variety of PDFs that will be made available on Moodle when they are assigned.

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 six 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.

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| ACTIVITY | # PTS | GRADING SCALE (%) |
| 4 tests |  400 | A | 90-100 |
| Labs |  240 | B | 80-89 |
| Quizzes |  30 | C | 70-79 |
| Total |  670 | D | 60-69 |
|  |  | F | <60 |
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Note: plus and minus grades are awarded for the upper and lower 2 percent of a grade range.

**TENTATIVE SCHEDULE AND READINGS**

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| Dates | Topic(s) | Reading/Viewing\* |
| Oct 1, 3 | Introduction to Nature, Society and Science; Planet Earth; Earth Sun Relationships | Kolbert, pp. 1-22 |
| Oct 8, 10 | Earth-Sun Relationships (cont.), Composition & Structure of Atmosphere, Atmospheric Radiation, Temperatures | Kolbert, pp. 23-69;Mann, Preface & Chapter 1 |
| **Oct 10** | **Lab Solar Altitude due** |  |
| **Oct 15** | **Exam 1 (note that class resumes at 1:05)** |  |
| **Oct 17** | **Lab Solar Energy due** |  |
| Oct 15, 17, 22, 29 | Atmospheric Moisture, Hydrologic Cycle, Weather Systems, Climate Change | Mann, Chapters 2-3; 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 |
| Oct 29 | Ocean Warming  | Kolbert 92-110 |
| **Oct 29** | **Lab Science Ice Core Analysis due** |  |
| **Oct 31** | **Exam 2 (note that class resumes at 1:05)** |  |
| Oct 31 | Sea Level Rise | Kolbert 111-124, tba |
| Nov 5, 7 | Ocean Acidification & Habitat Degradation | Kolbert 125-147, tba |
| **Nov 7** | **Lab Sea Level Change due** |  |
| Nov 12, 14 | Soil & Land Degradation | tba |
| **Nov 19**  | **Exam 3 (note that class resumes at 1:05)** |  |
| Nov 19, 21 | Soil Restoration, Species Extinction | tba, Kolbert 148-235 |
| **Nov 26** | **Lab Land Use due** |  |
| Nov 26, Dec 3, 5 | Scientific Explanation: Causal Mechanisms driving Climate Change, Accelerated Rates of Environmental Degradation & Species Extinction | tba; Kolbert 236-269 |
| **Dec 5** | **Lab Species Diversity and Extinction Due** |  |
| **Thursday,** **Dec 12, 10 am** | **Exam 4 (finals week, not comprehensive)** |  |

\*other reading may be assigned, not to exceed 60 pages. 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.