**Geography 105 Nature and Society**

**ONLINE**

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

Office Hours: via chat in the Moodle system, Zoom upon request, and perhaps other modalities.

Tuesday 6-8 p.m.; Monday & Wednesday 9-10 a.m.; Sunday 8-9 p.m.; and by appointment.

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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, and Documentary Accesses to Purchase:

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

-Montgomery, D. & Bickle, A. (2016). The Hidden Half of Nature. New York: WW Norton & Co.

I recommend that you get the printed rather than ebook versions of these books.

-There will also be PDFs available on Moodle when they are assigned, in addition to books.

-You should also set aside about $10 for documentary access, details to be announced.

-It is strongly recommended that you periodically access a printer to print out all reading and video viewing questions. The notes you take on them, and the other materials posted in Moodle, together with lab topics, will be the primary material that each of the four exams draw on. I estimate approximately 200 sheets of printing for the term. Rather than printing, you may manually write down each question and then also your answers. Your answers to all these questions are your study and source materials for exams – and unless otherwise indicated, they do not need to be turned in. Please be advised that I may revise the statement of the previous sentence as term progresses. Total estimated cost of course, including books, printing, & documentaries: $40.

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. The history and methods of science are threaded throughout much of this course.

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 view notes and their linked videos, and do the assigned readings and write down notes to all questions. Exams will consist mostly of multiple choice, true false, short answer, and short essay questions. No make-up examinations will be given except in the most unusual of circumstances, and must be arranged prior to the exam being missed. The time for exams is posted in the schedule that follows on this syllabus. The first three exams will be on Sunday evenings. Why? I have found over the twelve years that I have taught online that weekdays are bad, because students either have other synchronous classes that they must attend via Zoom, or have regular employment, or have child care because public schools are not in session. Friday and Saturday afternoons and evenings are key times of part time employment for many students. That leaves Sundays, when many attend church in the morning or early evenings and/or spend time with their parents and siblings. But by evening there are few jobs, few religious activities, and few other typical weekend activities that people are involved with. Personally, I would prefer not to give exams Sunday evenings because I would rather be spending time with my family than be monitoring online tests. But we need to have a common time to take exams, otherwise there is too much “leakage” of information from students who have taken the exam to those who have not. Given that some exam scores are likely to be curved, some students taking exams after others are unfairly advantaged, and consequently will pull down the curved exams scores of the rest of the students.

The fourth exam must be during finals week, which starts Monday and ends Friday. Therefore, giving it in our regularly scheduled time of Sunday evening is not possible. If we take it before Monday of finals week there is not enough time since the previous exam for adequate study and preparation (16 days at most including Thanksgiving), and if we take it the Sunday after finals week I doubt very many of you would be happy about that, wanting to move on with your holiday plans.

Three or 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. There may be brief quizzes to reinforce learning, where students may have the possibility of a retake. More on this later! Stay tuned to Moodle. We also may use some type of participatory forums – but the size of the class is a concern. Minor quizzes and forums may add more points possible to the list that follows:

Approximate points possible (subject to change)

|  |  |
| --- | --- |
| Activity | # points |
| 4 tests (100 pts. each) | 400 |
| labs | 200 |
| forums/quizzes (possible) | 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\* |
| Week 1  Sept 28-Oct 4 | Introduction to Nature, Society and Science; Planet Earth; Earth Sun Relationships | Kolbert, pp. 1-22 |
| Week 2  Oct 5-11 | Earth-Sun Relationships (cont.), Composition & Structure of Atmosphere, Atmospheric Radiation, Temperatures | Kolbert, pp. 23-69;  Mann, Preface & Chapter 1 |
| **Week 3**  **Oct 12-18** | **Lab Solar Altitude due Friday the 16th**  **Exam #1 Sunday the 18th (7:30-9 p.m.)** |  |
| Week 4  Oct 19-25 | Atmospheric Circulation, Moisture, Climate Change | 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 |
| Week 5  Oct 26 – Nov 1 | Climate Change, Ocean Warming | Kolbert 92-110 |
| **Oct 29** | **Lab: *How Scientists Date the Earth* due** |  |
| **Nov 1** | **Exam 2 Sunday (7:30-9 p.m.)** |  |
| Week 6  Nov 2-8 | Sea Level Rise, Ocean Acidification | Kolbert 111-124, documentary tba |
| Week 7  Nov 9-15 | Ocean Acidification & Habitat Degradation | Kolbert 125-147, more tba |
| Week 8  Nov 16-**22** | Soil & Land Degradation  **Exam 3 Sunday, Nov 22, 7:30-9 p.m.** | Montgomery & Bickle, tba |
| **Nov 23** | **Lab: Is Oregon’s Climate Changing? due** | Consult moodle for recent updates |
| Week 9  Nov 23-29 | Soil Restoration, Species Extinction | Montgomery & Bickle, tba, Kolbert tba |
| Week 10 November 30-Dec 6 | Scientific Explanation: Causal Mechanisms driving Climate Change, Accelerated Rates of Environmental Degradation & Species Extinction | Montgomery & Bickle, tba, Kolbert tba |
| **December 4** | **Lab Species Diversity & Extinction Due**  **(tentative due date)** | Consult moodle for recent updates |
| **Wednesday,**  **December 9,** | **Exam 4 (finals week, not comprehensive)**  **(10-12 am)** |  |

\*other topics may be assigned; with Moodle being the final authority. Note that all subjects and activities are subject to modification because of the unusual circumstances this term caused by COVID-19.

Any student who feels that she or he may need an accommodation for any type of disability may contact me during 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 completed by others during an examination. Students who engage in such actions may 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.