**Instructor:** Prof. David Singer (dsinger4@kent.edu)

**Meeting Times and Place:** Tuesday, Thursday, 11:00 am - 12:15 pm; McGilvrey 240

**Office hours:** Monday, Wednesday 1:30 - 3:30 pm, or by appointment; McGilvrey 211

**Course Description:**

 This course focuses on the fundamentals of earth processes with an emphasis on human interaction with their environment. We will explore natural processes and anthropogenic (human-impacted) effects on those processes in the context of natural hazards, natural resources and sustainability.

**Learning Outcomes**

* Explain the dynamic behavior of the Earth as a complex system.
* Discuss issues related to human population growth and its impact on the natural world.
* Discuss evidence of global climate change and impacts of anthropogenic warming.
* Describe appropriate locations for waste disposal.
* Explain the causes of soil, air and water pollution.
* Explain the factors that go into determining our resource footprint.

**In-Class Activities:** listening to lecture, taking notes during lecture, participating in activities, exams.

No make-up exams will be given without a valid excuse such as a certified medical need or accident report.

**Out-of-Class Activities:** reading textbook, completing in-class and out-of-class activities.

**Grading:** Grades will be based on the following percent distribution:

Exam I: 20 %

Exam II: 20 %

Exam III: 20 %

Exam IV: 25 %

Participation during in-class activities and out-of-class exercises: 15 %

 Over the course of the semester, there will be a few exercises distributed during class for completion outside of class time or conducted during the class. If the exercises are to be completed outside of class time, they will be due at the next class meeting. Students not in class will not be given a chance to make up an exercise, unless the absence is “excused” as per the university policy.

**Reading Material and Resources:** Reichard, J., 2013, *Environmental Geology*, 2nd Edition, McGraw Hill, ISBN-10: 0078096073

**Kent Core Courses:**

 This course may be used to satisfy a Kent Core requirement in science. The Kent Core as a whole is intended to broaden intellectual perspectives, foster ethical and humanitarian values, and prepare students for responsible citizenship and productive careers.

**Course Schedule:**

|  |  |  |  |
| --- | --- | --- | --- |
| Week | Date | Topic | Reading Assignment |
| 1 | 1/17 | Introduction | Chapter 1 |
|  | 1/19 | Introduction and Streams and flooding | Chapters 1 & 8 |
| 2 | 1/24 | Streams and flooding | Chapter 8 |
|  | 1/26 | Streams and flooding | Chapter 8 |
| 3 | 1/31 | Soil resources | Chapter 10 (and ch. 3) |
|  | 2/2 | Soil resources | Chapter 10 |
| 4 | 2/7 | Soil resources | Chapter 10 |
|  | 2/9 | **Exam I (ch. 1, 8, 10)** | Chapter 11 |
| 5 | 2/14 | Water resources | Chapter 11 |
|  | 2/16 | Water resources |  |
| 6 | 2/21 | Mineral/Rock resources | Chapter 12 (and ch. 4) |
|  | 2/23 | Mineral/Rock resources | Chapter 12 |
| 7 | 2/28 | Mineral/Rock resources | Chapter 12 |
|  | 3/2 | Fossil fuels | Chapter 13 |
| 8 | 3/7 | **EXAM II (ch. 11, 12)** |  |
|  | 3/9 | Fossil fuels | Chapter 13 |
| 9 | 3/14 | Fossil fuels | Chapter 13 |
|  | 3/16 | Alternative energy resources | Chapter 14 |
| 10 | 3/21 | Alternative energy resources | Chapter 14 |
|  | 3/23 | Alternative energy resources | Chapter 14 |
| 11 | 3/27 - 4/2 | **NO CLASSES – SPRING BREAK** |  |
|  | 4/4 | **EXAM III (ch. 13, 14)** |  |
| 12 | 4/6 | **Watch “The Return of the Cuyahoga”****\*\*\*submit a 1-page reflection by 4/13** |  |
|  | 4/11 | ***No class (lecture canceled)*** |  |
| 13 | 4/13 | Pollution and waste disposal | Chapter 15 |
|  | 4/18 | Pollution and waste disposal | Chapter 15 |
| 14 | 4/20 | Pollution and waste disposal | Chapter 15 |
|  | 4/25 | Global climate change | Chapter 16 |
| 15 | 4/27 | Global climate change | Chapter 16 |
|  | 5/2 | Global climate change | Chapter 16 |
|  | 5/4 | Global climate change | Chapter 16 |
|  |  | **EXAM IV – Final (ch. 15, 16 +)**

|  |  |  |
| --- | --- | --- |
|  |  |  |

 | 12:45 - 3:00 p.m. Tuesday, May 9th  |

The instructor reserves the right to modify this syllabus during the semester. These changes will be announced in class, and it is the students’ responsibility to attend class or make other necessary arrangements to be aware of the situation.

**Grading Policy:**

The following will yield letter grades:

100-93 **A** 92-90 **A-**  89-87 **B+** 86-83 **B** 82-80 **B-**
79-77 **C+** 76-73 **C** 72-70 **C-**

It is at the discretion of the instructor to grade ‘on a curve’, where the mean will be set at a B-.

**Email Etiquette and Policy**:

I will respond to all emails. Always include a subject line in your email and identify what class you are emailing about. Allow a 24-hour response time during weekdays, and a 48-hour response time during weekends or holidays. If you do not receive an answer, then I did not receive your email. Only email me from your kent.edu email address; other addresses, like google.com, aol.com, etc., get flagged as spam and deleted. Include your first and last name on any electronic correspondence.

About emailing grades: It is illegal to send grades over email. Do not ask me to do it.

**Attendance and classroom logistics:**

Attendance is mandatory and arriving late to class imposes disruption to others. Please plan to arrive on time. Cell phones and other electronic gadgets must be turned off during the lectures. You may use your laptop computer to take notes, but please remain off line during the class time. ​

I do not take attendance each lecture. However, I do have unannounced in-class activities that count towards your course. So that in a way serves as a means of taking attendance.

The policy on Class Attendance and Class Absence (3.01.2) can be found here:

http://www2.kent.edu/policyreg/policydetails.cfm?customel\_datapageid\_1976529=2037744

**Official dates:**

*Students can add or withdraw from this course without receiving a W through the 2nd week of the semester. Go to the Registrar's webpage http://www.kent.edu/registrar/fall-important-dates for exact dates*

**Statement concerning cheating and plagiarism:**

*University policy 3342-3-01.8 deals with the problem of academic dishonesty, cheating, and plagiarism. None of these will be tolerated in this class. The sanctions provided in this policy will be used to deal with any violations. If you have any questions, please read the policy at:*

 *http://www.kent.edu/policyreg/chap3/3-01-8.cfm and/or ask.*

**Statement regarding students with disabilities:**

*University policy 3342-3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through Student Accessibility Services (contact 330-672-3391 or visit www.kent.edu/sas for more information on registration procedures).*