

ENVS 12: Introduction to Environmental Science Spring 2017

Instructor: Dr. David Kratzmann Phone: 707-778-3957
Office: 678 Call Bldg Email: dkratzmann@santarosa.edu
Office Hours *in PC678 unless otherwise stated*
Mon: 9:00-10:00 3:00-3:30* Tue: 9:00-10:00 3:00-3:30*
Wed: 9:00-10:00 (garden) Thu: 9:00-10:00 3:00-3:30*

Required Text: Environmental Science for a Changing World, Houtman, Karr, & Interlandi 2013
(printed or e-book). ** We will be using CANVAS for all online course

Student Learning Outcomes

Upon successful completion of the course the student will be able to:

1. Apply scientific methodologies and principles to solve environmental questions
2. Identify & describe major global, regional, and local environmental issues
3. Analyze the scientific basis of major environmental issues and identify and evaluate potential solutions
4. Recognize the complex interplay between humans and the environment and examine the impacts of environmental issues on human populations and humans on the environment

Course Outline of Record:

http://busapp02.santarosa.edu/SRweb/SR_CourseOutlines.aspx?CVID=23796&Semester=20147

Evaluation and Grading

Your final grade in this course is achieved through a combination of exams, weekly assignments, projects, participation, and a service learning component. There are 500 points possible in this course: distributed as follows:

Midterm exams (4): 70 points each (x3 = 210 pts) → your lowest exam result will be dropped!
Weekly quizzes worth 10 points each week (x10 weeks = 100 pts)
Project #1: worth 35 pts and Project #2: worth 75 pts (110 pts)
Service Learning: 8 hours community work worth 80 pts

Final letter grades will be based in the number of points earned, according to the following scale:

A: 500-450 pts → 90+% D: 325-275 pts → 64-55%
B: 449-400 pts → 89-80% F: below 275 pts → <55%
C: 399-325 pts → 79-65%

Exams: There will be four (4) midterm exams during the semester, worth 70 points each (40-50 objective and 10-20 written points) - ~42% of grade. **Your lowest score from the midterm exams will be dropped when calculating your final grade.** Questions are designed to test your understanding of subject matter and your ability to assimilate and incorporate information. Exams will include some combination of true/false, multiple choice, fill-in-the-blanks, and short and long answer format questions.

Important exam notes:

- Late arrivals will **NOT** be allowed to start an exam once another student has finished and left.
- Your lowest score from the four midterm exams will be dropped. Exams cannot be made up except if you notify me **IN ADVANCE** (after the fact does not constitute in advance) and there are extenuating circumstances for missing the exam or you have documentation from the Health Center of illness.
- Cheating will not be tolerated and will result in no credit for the exam or activity.

Weekly Quizzes: Quizzes will be available via CANVAS. The total points for all quizzes is 120 points - ~24%. It is your responsibility to keep track of and complete the weekly assignments by the due dates (weekly at 6pm).

Successful completion of the course is not possible if you do not complete the online assignments.

Project #1: You will complete a mini project during the first half of the semester. It will be an individual submission made electronically (due approximately in week #8). It is worth 25 pts (~5%) and instructions will be issued early in the semester. Points will be deducted for failing to follow the instructions to the letter.

Project #2: In the second half of the semester I will give you information regarding the final project – on alternative energies. It is in two parts, an individual write-up and a group-based poster presentation. Research and participation in this project is worth 65 pts (~13%) of the overall grade. Submission on the paper (45 pts) and participation in the discussion (20 pts) are part of the grade!

Service Learning: 8 hours of work with community based environmental groups is required. I will provide you with the various opportunities to visiting local projects/groups and participate in their activities. More details will follow as opportunities arise. This is worth 80 pts or 15% of the overall grade.

Suggestions for Success

- Please turn your cell phone and other electronic devices **OFF DURING CLASS!**
- Stay on top of the material. You may be expected to spend up to 6 hours per week **OUTSIDE** of class to complete the required reading, assignments, and studying.
- Devote the time necessary to succeed in this course - **do the assigned reading, review lecture notes, take advantage of online and textbook resources, study for exams, and, most importantly, show up for class.** Everyone can succeed in this class, so set high expectations and then work hard to meet them.
- Do not hesitate to ask questions, participation is encouraged. Get to know your instructor & your classmates.
- I reserve the right to drop any student who misses more than 10% of classes.
- Abide by the Code of Student Conduct while in class and on campus, including rules on cheating and plagiarism. You

Safety/Emergency Information: Please note the location of the red Emergency Preparedness Handbook in the classroom. In an emergency situation, immediately contact **Campus Police at 527-1000 or dial 1000** from any campus phone. In the event of an emergency that requires evacuation from the building, please leave the class immediately, but calmly. If you are a student with a disability who may need assistance in an evacuation, please see me during my office hours as soon as possible so we can discuss an evacuation plan.

Disability Resource Information: If you need disability related accommodations for this class, such as a note taker, test taking services, special furniture, use of service animal, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to me as soon as possible. You may also speak with me privately during office hours about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD is located in Petaluma Village on the Petaluma campus and Analy Village on the Santa Rosa campus.

Transfer Track**Section 4115****Mon & Wed 10:00-12:00 Tentative Schedule (subject to change)**

Week #	Date	Topic	Reading
3	9/4	NO CLASS - LABOR DAY	
	9/6	Intro to Environmental Science	Ch 1
4	9/11	Toxins / Economics	Ch 3 & 5
	9/13	Human Populations	Ch 4
5	9/18	<i>Exam Review Activity</i>	
	9/20	<u>EXAM #1 – covers Ch 1, 3, 4, 5</u>	
6	9/25	Ecosystems	Ch 6
	9/27	Population Ecology	Ch 7
7	10/2	Biodiversity	Ch 9
	10/4	<i>Tree Measuring Activity</i>	<i>Ch 11</i>
8	10/9	<i>CO2 calculations</i>	
	10/11	<i>Exam Review Activity</i>	
9	10/16	<u>Exam #2 – covers Ch 6, 7, 9 + activities</u>	
	10/18	Water as a Resource	Ch 15
10	10/23	Water Pollution	Ch 16
	10/25	Marine Environments	Ch 13 & 14
11	10/30	Solid Waste	Ch 17
	11/1	Air Pollution	Ch 21
12	11/6	<i>Exam Review Activity</i>	
	11/8	<u>Exam #3 – covers Ch 13-17, 21</u>	
13	11/13	Fossil Fuels – Coal	Ch 19
	11/15	Fossil Fuels – Oil / Gas	Ch 20
14	11/20	Alternative Energies	Ch 24
	11/22	<i>major project</i>	
15	11/27	Climate Change	Ch 22
	11/29	Climate Change or Review as needed	Ch 22
16	12/4	<u>Exam #4 – covers Ch 19, 20, 22, 24</u>	
	12/6	<u>Final Project Submission & Discussion</u>	
17	12/11	<i>Last Week Regular Semester</i>	
	12/13		
18		<i>Regular Semester Final Exams</i>	