

Course Code & No. - Section:	ENVS 200 - Section 2
Course Title (Credits):	Environmental Systems (3)
Term & Year:	Spring 2014
Course Ref. No. (CRN):	10158
Instructor:	Sean Ryland
Email:	sryland@sierranevada.edu
Office:	2 nd floor TCES – SNC Faculty Area
Office Hours:	2:00-4:00 PM Th and by appointment
Class Meeting Time:	T-Th 11:30-12:45
Location:	TCES 215
Prerequisites (from Catalog):	ENGL102 and CORE 101 and Math
Corequisites (from Catalog):	ENVS 205 (lab)

Course Description

This course introduces students to natural systems on earth, and how humans are molded by them and affect them. It concerns the connection of economic, ethical, and physical environments, and guides students through the study of environmental and economic sustainability, and how they affect human equity treatment. It also reinforces students' numeracy skills on probability, graphic, calculation, and statistics, in an environmental context that includes application of Tahoe Basin.

Student Outcomes (from the Course Approval Form)

Upon successful completion of this course, a student will be able to: (for example)

1. Explain and apply knowledge of how the world's climate and ecological systems work
2. Create correctly formatted graphs of actual data, both on paper and using Excel
3. Apply the concepts of sustainability to human- ecosystem interactions, considering economics and culture
4. Conduct scientific research, include hypothesis formation, experimental design, and statistical tests
5. Describe the key characteristics of the ecosystems and many species of the Tahoe Basin

Methods of Assessing Student Outcomes

Student outcomes will be assessed using the following:

1. Assignments of increasing levels of challenge;
2. Writing assignment(s), submitted in stages, both based on library and lab work;
3. Written in-class, closed-book examinations;
4. Projects done in the field.
5. Written in-class, closed-book, comprehensive final examination and/or project that includes coverage of the topics discussed in the course outline.

Instructional Strategies

This class will utilize lectures, movies, lab work, small groups, and individual work in class using laptop computers, inquiry learning, case studies, and homework assignments. The course makes use of the *Moodle* course management system.

Required Texts and Materials

1. *Environmental Science*; Daniel Chiras; 8th ed. Jones & Bartlett; 2010; ISBN: 978-0-7637-5925-4
2. Laptop computer (one that meets the published SNC Laptop Requirements)

Prim Library Resources

Using the library's resources effectively (not just Internet resources) contributes to developing each of SNC's core themes by exposing students to high quality academic resources, diverse opinions, new ideas, and a future that includes building on a liberal arts education. In this course, you will be expected to utilize the library's resources (either on-site or remotely) as you complete your assignments.

Prim Library Resources for ENVS 200; Environmental Systems includes but are not limited to:

1. Electronic databases (for peer-reviewed research articles, reviews, newspaper and magazine articles): Electronic databases most likely to include articles related to your term paper topics are EBSCO: Academic Search Premier, Environment Complete, General Science Collection, GreenFILE, Health Source, Newspaper Source, and TOPICsearch; BioOne; and GREENR.
2. Hardcopy periodicals: Prim Library has current subscriptions for Science, New Scientist, Science News, and National Geographic Magazine. Any of these are likely to have articles on your term paper topic. Full-text articles from many more periodicals are available through the electronic databases.
3. Lib Guides: <http://Libguides.sierranevada.edu> These web pages contain instructions about how to use resources available at Prim Library, how to evaluation the appropriateness of information from the Internet for a research paper, how to cite sources, and other topics related to finding and using information.

Attendance

Attendance will be taken for scholarship purposes and it is recommended that you attend each class. Students are required to be in class promptly and ready to learn and participate at the scheduled meeting time. Tardiness will not be tolerated.

Class Requirements

Assignments are due at the beginning of class, no exceptions. Students are required to bring a hard copy of assignments to class, emailed copies are not acceptable. A letter grade will be deducted for each day the assignment is late. Students are required to bring laptops to class, however laptops and phone are to remain off unless otherwise noted. Please dress appropriately and be prepared to spend some time outside. Students may be asked to offer cars for car-pooling; gas expenses will be compensated.

Quizzes

Students are required to take at least 10 online quizzes throughout the course. A total of 14 quizzes will be posted giving the student opportunity to miss as many as 4 quizzes. Students can take more than 10 quizzes, at which point the best 10 scores will go towards your grade. Quizzes will be posted to the course Moodle site by Monday night each week and will remain available until Tuesday at 11:00 am. Once a quiz is closed it will remain closed. It is the student's responsibility to gain access to Moodle.

In Class Writings

Students are required to turn in a total of 10 out of the 12 in class writings (ICW). ICWs will be assigned at the beginning of class, sharp - 11:30 am and will generally take about 10 minutes to complete. ICWs are designed to give students practice articulating arguments, supporting or refuting arguments and contemplating the course material.

Projects

Throughout the semester students will be assigned projects to provide an addition method for interacting with the course material. Projects will either be primarily in class or out of class assignments and topics could include debates, oral presentations, data analysis, and case studies. Projects will be introduced in class and further details discussed later.

Exams

A total of 4 exams during the semester corresponding to each section will be given during the semester.

Grading Policy

Assignment	Points	Number		%
Quizzes	10	10 out of 12 assigned	100	12.5
In Class Writings	10	10 out of 12 assigned	100	12.5
Exams	100	4	400	50
Projects	50	4	200	25
		TOTAL	800	

*Total number of assignments could change during the semester

Sanctions for Cheating and/or Plagiarism

The Honor Code

The faculty of SNC believes students must be held to high standards of integrity in all aspects of college life in order to promote the educational mission of the College and to encourage respect for the rights of others. Each student brings to the SNC community unique skills,

talents, values and experiences which, when expressed within the community, contribute to the quality of the educational environment and the growth and development of the individual. Students share with members of the faculty, administration and staff the responsibility for creating and maintaining an environment conducive to learning and personal development, where actions are guided by mutual respect, integrity, responsibility and trust. The faculty and students alike must make diligent efforts to ensure high standards are upheld by their colleagues and peers as well as themselves. Therefore faculty and students accept responsibility for maintaining these standards at Sierra Nevada College and are obligated to comply with its regulations and procedures, which they are expected to read and understand. If writing is turned in by you, without citation or shared credit, it means you wrote it. Any shared work should be credited, paragraph by paragraph.

Consequences of Violating the Student Honor Code

SNC students and faculty share the responsibility for maintaining an environment of academic honesty. Thus, all are responsible for knowing and abiding by the SNC Faculty/Student Honor Code published in the current SNC Catalog. Faculty are responsible for presenting the Honor Code and the consequences of violating it to students at the start of their classes AND for reporting all incidences of academic dishonesty to the Provost. Students are responsible for knowing what constitutes CHEATING, PLAGIARISM and FABRICATION and for refraining from these and other forms of academic dishonesty. Violations of the Honor Code become part of a student's academic record.

- 1st Offense: Student receives a zero for assignment/exam and counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.
- 2nd Offense: Student fails course and receives counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.
- 3rd Offense: Student is expelled.

Moodle Course Site: <http://moodle.sierranevada.edu/moodle/>

ADA Accommodations

In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, students with a documented disability are eligible for support services and accommodations. If a student wishes to request an accommodation, please contact the Director of Academic Support Services, Henry Conover, at (775) 831-1314 x7534, hconover@sierranevada.edu or go to the OASIS offices on the third floor of Prim Library within the first week of the semester.

The SNC Email System

The SNC email system is the official communication vehicle among students, faculty members and administrative staff and is designed to protect the confidentiality of student information as required by the Family Educational Rights and Privacy Act of 1974 Act (FERPA). Students should check their college email accounts daily during the school year.

Students have a right to forward their SNC e-mail to another e-mail account (for example, @hotmail or @gmail). However, confidentiality of student information protected by FERPA cannot be guaranteed for SNC e-mail forwarded to an outside vendor. Having email redirected does not absolve a student from the responsibilities associated with official communication sent to his or her SNC email account.

Acknowledgements:

Thanks to Andy Rost for the use of his syllabus and input on the structure of this course.

WEEK	DAY	DATE	TOPICS	CHAPTERS	THEMES	Proj.	Quiz	ICW
1	T	1/21	Intro		How the planet works: Crash course in Ecology			1
	TH	1/23	Three S's	1,2,3			1	
2	T	1/28	Ecology/Physical 1	5				2
	TH	1/30	Ecology/Physical 2	5			2	
3	T	2/4	Ecology/Chemical	4				3
	TH	2/6	Ecology/Chemical	4			3	
4	T	2/11	Ecology/Biological	6		1		4
	TH	2/13	Ecology/Biological	6			4	
5	T	2/18	EXAM # 1					
	TH	2/20	Pop. Growth	8	The 'Biggest Problems'			
6	T	2/25	Pop. Growth Math	8				5
	TH	2/27	Energy 1	14			5	
7	T	3/4	Energy 2	14				6
	TH	3/6	Energy 3	14		2	6	
8	T	3/11	EXAM #2					
	TH	3/13	Soils/Grasslands	10-12	Natural Resources and their mismanagement: Pollution			
9	T	3/25	Forests	12				7
	TH	3/27	Water	13			7	
10	T	4/1	Air Pollution 1	19				8
	TH	4/3	Air Pollution 2	20			8	
11	T	4/8	Water Pollution	21		3		9
	TH	4/10	Waste	23			9	
12	T	4/15	EXAM #3					
	TH	4/17	Pop. growth	9	Now What: Sustainability			
13	T	4/22	Land Management					10
	TH	4/24	Renewable Energy	15			10	
14	T	4/29	Renewable Energy	15				11
	TH	5/1	Sustainability Pres.			4	11	
15	T	5/6	Sustainability Pres.			4		12
	TH	5/8	Final Prep					
Finals	T	5/13	EXAM #4 (11:30-2:30)					