

Course Code & No. - Section:	ENVS 205, section 3
Course Title (Credits):	Environmental Science Lab
Term & Year:	Fall 2017
Course Ref. No. (CRN):	80280
Instructor:	Suzanne Gollery
Phone:	Office: 775 881 7456 Cell: 775-813-4215 (8 AM to 9 PM)
Email:	sgollery@sierranevada.edu
Office:	2 nd floor faculty area TCES 223
Office Hours:	Mon 1:00-2:30, Tues 2:30-3:45 PM, Wed 10:00-11:15 AM or by appointment
Class Meeting Time:	Thursday (R) 1:00-3:45 PM
Location:	TCES, room 205 – Environmental Science/Physics Lab
Prerequisites (from Catalog):	ENGL 102, CORE 101, and MATH 101 or higher
Corequisites (from Catalog):	ENVS 200 (pre-requisite is acceptable)

Course Description

This lab accompanies ENVS 200, Environmental Science. It allows for the actual practice of science: posing hypotheses, gathering data, organizing and presenting data, and statistically testing hypotheses. It also includes other approaches to science: simulation under constraints, careful observation, and organization and classification.

Required Texts and Materials

1. Laptop computer (one that meets the published SNC Laptop Requirements). Students are required to have an installation of Microsoft Office (Word, PowerPoint, Excel) or Open Office (www.OpenOffice.org).
2. Students are required to download and/or print lab materials before class starts from the Moodle class site at <http://sncmoodle.sierranevada.edu/>
3. Always wear clothing appropriate for outdoor conditions unless you KNOW we will stay indoors.

Instructional Strategies

The lab will utilize field trips, observations, lab work, computer models, software, and discussions. Lab handouts and schedule will be posted on a Moodle site called [ENVS 205: Environmental Science Lab \(Gollery, Fall 2017\)](#)

Grading Policy

Assignments	Points	# of assignments	Total
Lab Assignments	15	12	180
Class participation	2	15	30
Lab Reports	25	2	50
		Total	260

Grading Scale

90-100%	234 – 260 points	→ A
80-99%	208 – 233 points	→ B
65-79%	169 – 207 points	→ C
50-64%	130 – 168 points	→ D
<50%	<130 points	→ F

Assignment details:

Lab assignments are work that you do following instructions on lab handouts. The work may include answering short answer questions, showing calculations, making observations, recording quantitative data, or constructing a spreadsheet or chart (graph) that you print or email to Suzanne.

Class participation: all students who arrive at class on time, are prepared with a printed lab handout, and stay until classwork is completed and they are excused, will receive 2 participation points. Students can lose a participation point for needing to print a lab handout after class starts, tardiness, or leaving early to complete work outside of class. Students with excused absences can earn participation points by notifying the instructor before the absence if at all possible and checking in with the instructor when they make up lab activities.

Lab reports: Scientists communicate by publishing lab report-like research papers in peer-reviewed scientific journals. ENVS 205 students will practice research writing by submitting typed lab reports for two lab activities. After receiving feedback, students can rewrite a lab report for an improved score.

Attendance

Students are required to attend each lab. More than half of the labs will be due at the end of the lab period with no option for a make-up assignment after an unexcused absence. Lab assignments are due either at the end of each period or at the beginning of the next lab period. Roll will be taken for scholarship purposes. Chronic tardiness is rude and could lower your course grade.

Excused absences for SNC athletes and other curves that life throws you:

SNC athletes receive excused absences for travel related to competitions, but athletes are NOT excused from due dates and late work policies apply. In other words, your butt is excused from the classroom or field trip, but you aren't excused from assignment due dates, so plan to turn in work BEFORE you travel. Athletes are encouraged to attend the other ENVS 205 sections to make up missed Environmental Science Lab activities. This will require planning ahead, as the other ENVS 205 section may NOT do the activity you are scheduled to miss in the same week. You must contact both ENVS instructors prior to attending another section. If athletes cannot attend another lab section, instructors will work with you to arrange other make-up work.

The ENVS 205 instructors MAY excuse other absences for significant illnesses, a family emergency, military duty, or some other curve that life throws you that is beyond your control. However, we will NOT excuse absences because you overslept, you worked on an assignment for another class, your work schedule overlaps class, you drove someone else somewhere, or you went on non-athletic, non-academic SNC trip. You are responsible for meeting with your instructor about making up an excused absence.

Data Integrity Responsibility

In science, data integrity is everything. Students should record data in a safe permanent form, for example in a notebook, rather than a loose sheet of paper or in electronic form on one device. All data should immediately be backed up on Google Docs or some other shared platform that ALL team members can access. At the end of the field trip or lab, all members of the lab group should have the data. This is simply done if everyone photographs your data at the end of class and backs up the photo online. The lab's purpose is empiricism. Students are responsible for gathering and using their own data. If absent during data collection, this can't be done, and student must rely on and trust other's work. There is a 30% penalty for missing data gathering for any lab. Students in group where the data is lost will be treated as if they weren't in lab, and suffer the same 30% penalty. All members of data-gathering teams are responsible for data custody. Fabrication of data will be treated like plagiarism: you're claiming work that's not yours. First offenders will fail the assignment, plus have their grade lowered one point, plus be added to the school plagiarism database.

Other Class Policies

1. Lab assignments due at the following class are due at the beginning of class or are late.
2. Students are required to bring laptops to every lab class.
3. Dress appropriately for outdoor labs, or you will be left behind and receive an unexcused absence. Tardy students will also be left behind and receive an unexcused absence.
4. Although labs are typically done in teams, each student must write independent lab assignments **in their own words**.
5. Make sure everyone on your team has all of the data at the end of each class.
6. You may NOT use phones, laptops, or tablets unless you are using them for lab work. Repeat violators will be asked to stow their devices by the door at the beginning of class.
7. You must be able to receive communications about ENVS 205 promptly **by email**.

Student Outcomes Upon successful completion of this course, a student will be able to:

1. Conduct scientific research, include hypothesis formation, experimental design, and statistical tests
2. Assess hypotheses for testability, and articulate the data necessary to test
3. Identify the correct statistical test for a particular data set, under limited testing circumstances.
4. Organize data and do calculations in Excel or other spreadsheet, and organize their work for presentation.
5. Create correctly formatted graphs of actual data, both on paper and using Excel
6. Create lab reports of correct formats and sequence
7. 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. Class preparation assignments (CPAs) or in-class quizzes
2. Field and in-class assignments of increasing levels of challenge
3. Writing lab reports based on lab work and library research
4. Instructor observation of student participation in class and in the field

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.

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.

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.

Cutting and pasting or copying phrases or sentences from internet sources, books, articles, or other students is a violation of the student honor code. If you consistently write using your own words, you will avoid plagiarizing or cheating.

ENVS 205 Thursday Lab schedule

WEEK	DATE	LAB	Inside/Outside	Work Due	Computer use
1	8/24	Build your Watershed	Inside	Assignment	No
2	8/31	Local Exploration	Outside	Assignment	No
3	9/7	Dichotomous Key	In	Assignment	Yes
4	9/14	Tree Distribution 1	Out	Assignment	No
5	9/21	Tree Distribution 2	In	Lab report	Yes
6	9/28	Population Growth 1	In		Yes
7	10/5	Population Growth 2	In		Yes
8	10/12	Crayfish	Out		No
9	10/19	Taylor Creek	Out		No
10	10/26				
11	11/2				
12	11/9				
13	11/16				
14	11/30				
15	12/5				
Finals					

Lab schedule may change during the semester due to weather, driving conditions, or other circumstances.