

San José State University
College of Social Sciences, Department of Environmental Studies
ENVS 198, Senior Seminar, Spring 2019

Instructor	Will Russell
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Office Hours	Monday 1:30-2:30 or by apt.
Class Days and Time	MW 12:00 - 1:15pm
Classroom	WSQ 113
Prerequisite/s	Filed for graduation, completion of Environmental Studies core, including EnvS 100W

Course Description

This course is the culminating experience in environmental studies, uniting our interdisciplinary curriculum through research, synthesis, and critical assessment. The goal is your transition from the undergraduate experience to full professionalism. Prerequisites: Filed for graduation, completion of Environmental Studies core, including EnvS 100W.

Course Goals and Student Learning Objectives

EnvS 198 is designed to allow you to probe more deeply into topics introduced in your undergraduate career. The class affords you the opportunity to design a complete a practical project of your own, and to network with professionals and employers to expand your training to prepare you for work in environment fields.

This course is run using a project-oriented approach. Each student will become an expert through literature research and fieldwork in the topic he or she selects for the course, and each student will teach the other students about this subject through a combination of readings, presentations, in-class report outs, and a written report.

This course also has the goal of reinforcing all four of the Department of Environmental Studies Program Learning Objectives, listed below. These objectives encompass the knowledge and skills we expect all Environmental Studies graduates to possess.

Department of Environmental Studies Program Learning Objectives

- 1) *Qualitative Environmental Literacy*: Students are able to write a logical analytical paper using good writing style and construction supported by appropriate research.
- 2) *Quantitative Environmental Literacy*: Students are able to determine, apply and interpret appropriate basic statistical or other quantitative analyses to environmental data (Chi-square, ANOVA, Regression)

- 3) *Content Environmental Literacy*: Students will develop proficiency in the interdisciplinary sustainability principles that are the foundation of environmental studies; they will know the key environmental challenges facing the planet, know relevant interdisciplinary information about these challenges, and be able to develop/identify feasible solutions
- 4) *Professional Skills*: 4A) Students are able to productively conduct group/team work to deliver professional quality presentations and reports; 4B) Students demonstrate professional work skills.

Required Texts and Materials

- There is no specific textbook for this class, but readings may be assigned throughout the semester on Canvas.
- Bring a dedicated flash drive to class every class period so that you can save your work from the computer lab

Course Expectations

Attendance and preparation: Each student will be expected to attend all class meetings and to complete all assignments and readings before the class period.

Discussions: We will have regular discussions related to student research projects in class. Participation in discussions is part of your grade. It is imperative that all students be respectful and considerate to each other. All opinions are welcome and critical analysis is strongly encouraged.

Citations and Referencing. We will be using the APA (American Psychological Association) style in this course. The citation style and format must be precise and consistent throughout the document. All references should be peer-reviewed academic journal research papers or other primary sources in your field. Internet-only sources should be avoided unless absolutely necessary.

Presentations. As a presenter it is your job to make your subject informative and engaging. Please be professional and creative!

Respect and decorum. All class participants will behave in a manner that provides a positive and comfortable learning environment for everybody.

Assignments - (See Canvas for more details on all assignments)

Prospectus - First consider, what environmental problem will your project will be addressing (think big picture). Next, consider what lens you will be looking at this problem through (social science, life science, physical science, etc.). Finally, you will need to develop the broad logic leading to your specific choice of research questions (1-2 paragraphs). **Hint: contacting**

professionals and/or faculty members in your field for ideas can be exceedingly helpful with this!

Resume/Curriculum Vitae - The Curriculum Vitae (CV) is a detailed academic resume. Unlike a standard resume, the CV is not limited in length, and should include all pertinent experience (volunteer, work, academic), honors, achievements, and special skills (GIS, fluency in other languages, etc.). ***For example: If you do a good on job on this project you can add it as a line on your resume (i.e. senior project.....).***

Motivation and Scope – Using your Prospectus as a starting point, write a 3 page (800 +/- 50 words) Motivation and Scope that describes your problem statement, research question, motivation, preliminary literature review and first thoughts about research design. Required components include: (a) Working title. (b) Problem statement. Briefly review the importance of this question as an environmental topic by including factual information and relevant statistics and information. (c) Clear statement of research question. (d) Motivation for why you are interested in it. (e) Include at least four peer reviewed papers as references. (f) Describe prior research efforts to address the problem.

Literature Review - In this section you will summarize the body of literature that relates to your topic (2-3 pages, or 800 words), with a minimum of 10-15 primary peer reviewed references (**not web based!**). Organize this section like an academic essay - from the general to specific. Begin by describing the theoretical framework that you are using to address your topic. Follow with detailed descriptive information pertinent to your specific topic. Use subheadings to reflect internal organization may include subsections. **Be sure to paraphrase all information and cite the source of the information. Please do not use quotes.**

Methods - This section will be used to describe what the project objectives/study questions are; as well as how you plan to accomplish your goals. The methods section will include the following two elements:

1. Questions, Objectives and/or Hypotheses. In this section you should clearly state the central, and specific, objectives or questions that your project will address. Three to 5 specific testable predictions (active or null/statistical hypotheses) should be considered as well (1 page or less).
2. Project Procedures. Be sure to include methods related to your project including a description of your study site, population, species etc. (where, or who), a complete and repeatable detailed description of how the project will be conducted including data gathering, and a detailed description of how results will be analyzed (2-3 pages). The project can have a qualitative dimension, but also **must include the analysis of quantitative data!**

Project Proposal - The complete proposal will include revisions of the the assignments listed above in the following order: *Motivation and Scope, Literature Review, Methods, Resume*

Data Collection Reports – Two progress reports on data gathered and analysis will be presented in class. 1) For the first progress report all data must be organized in an Excel spreadsheet, with

preliminary descriptive data analysis included (this will differ depending on the type of data you have, but may include graphs of means, correlations, etc.). 2) For the second progress report inferential statistics will be included (i.e. T-tests, ANOVA, regression, chi-square, etc.).

Results –The Results section will include all qualitative, descriptive, and inferential results that came out of your project, presented in an organized and cohesive fashion.

Discussion and Conclusions - The discussion section will include a summary of how the results related to the projects objectives and hypotheses. In addition, results will be tied back into the project focus and literature review with a description of how your results compare to the ideas that you found in the literature.

Final Report - This paper brings together sections you have already written, including your intro and literature review, research questions/hypotheses, and methods from your proposal. However, be sure to revise these sections from your proposal to clearly reflect the research you actually have done, and put methods in the past tense (see details below). The report should be a full presentation and discussion of all the information, findings and interpretation relevant to your research topic. It is expected to be in the range of 15 pages, including graphs (nicely presented with readable axis titles, p-values and captions: Figure 1, Table 1, etc.), references cited, using 1.5 or double spacing and a 12-point font. Do not forget page numbers! **Caution: Be sure to write all the prose YOURSELF, and cite the sources of outside information (Now is not the time to fail the course for using unoriginal wording). Be sure to use terminology appropriate to the field of environmental studies and your research topic. (See Canvas for more details on this assignment).**

Poster/Poster Presentation

Each student will produce a draft poster on a single PowerPoint slide to be presented and critiqued, and a final printed poster for the final poster session on the last day. The poster should integrate and summarize all aspects of the project with boxes for the following information: Title, Author, Affiliation (Department Environmental Studies, San Jose State University); Background; Methods; Discussion/Conclusions; Literature Cited.

In Class Assignments

A variety of activities, including in-class writing assignments, reports, quizzes, discussions etc. will take place in class. There will be no make-ups for these assignments.

Grading

Assignment	Score
Prospectus	5
Resume/CV	5
Motivation and Scope	5
Literature Review	5
Methods	5
Project Proposal	10
Data Collection Reports	10
Results	15
Discussion and Conclusions	5
Final Report	20
Poster/Poster Presentation	10
In Class Assignments	10

If you earn:	You will receive:
90 - 100 %	A (90 – 97), A+ (>97)
80 – 89 %	B (80 – 86), B+ (87-89)
70 – 79 %	C (70 – 76), C+ (77-79)
60 – 69%	D (60 – 66), D+ (67-69)
< 50 %	F

University Policies

Policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>

Dropping and Adding

Drop Deadline: Monday, February 5, is the **last day to drop** a class without a “W” grade.

Add Deadline: Monday, February 12, is the **last day to add** a course & Register Late.

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Course Schedule - Subject to change

Week	Date	Class Content	Assignments Due
1	1/28 1/30	Course introduction; Developing Research Projects Discussion: Research Groups/Your environmental interests	In class assignment groups/project Ideas
2	2/4 2/6	Individual meetings with Dr. Russell. Discussion: Your project idea and why? Work on Resumes in computer lab.	Prospectus
3	2/11 2/13	Scientific Method; How to read a peer-reviewed paper; How to conduct literature research!	Resume/CV
4	2/18 2/20	Quantitative and Qualitative Research Discussion: Key literature you found	Motivation and Scope <i>In Class: Dissecting a Research Paper</i>
5	2/25 2/27	Data Collection Methods Discussion: Methods relevant to your topic for discussion (Bring a methods paper)	Literature Review
6	3/4 3/6	Relevant Analysis Methods and Statistics Discussion: Likely methods you can use to address your research question	Methods
7	3/11 3/13	Conducting Field Research Discussion: Honing your data collection and analysis methods <i>(If needed, we will have another individual meeting session)</i>	Project Proposal
8	3/18 3/20	Setting up a Spreadsheet for Data Analysis Discussion: Progress on your data collection	Extra Credit Interview Assignment
9	3/25 3/27	Statistics Lab: Bring a spreadsheet with whatever data you have collected.	Data Collection Reports
	4/1	Cesar Chavez Day - Spring Recess	
10	4/8 4/10	Statistics Lab: Bring a spreadsheet with whatever data you have collected.	
11	4/15 4/17	Round table: Discuss your research topic, question, methods, and progress to date Preparing the Final Report and Presentation	Data Collection Reports
12	4/22 4/24	Round table: Your data collection progress and analysis. Preparing the Poster and Draft Paper	Results
13	4/29 5/1	Developing a Presentation and the Final Paper Lab time.	Discussion and Conclusions
14	5/6	PPT Presentations of posters	Draft Posters Due
	5/8	PPT Presentations of posters	
15	5/13	PPT Presentations of posters	
	5/15	PPT Presentations of posters	Final Reports Due
16	5/17	FINAL EXAM PERIOD: Friday May 17th 9:45:12:00 Poster Session	Posters Due