

Department of Environmental Studies: Undergraduate Program Assessment Plan

This plan provides the Department plan for Assessment of our majors. It lays out the Program Learning Outcomes (PLOs) for all undergraduate students in the BS and BA degrees, our measurable goals, the competencies we expect of students, and how students are assessed.

All PLOs are assessed within each 5-year program review cycle, as listed.

We have mapped the PLOs to the University Learning Goals (see the ULGs at www.sjsu.edu/senate/docs/S13-2.pdf)

- Highlighted levels of achievement are for Department use only in evaluating progress toward meeting the LO Measurable Goal

* Student performance evaluated as follows: Exceeds expectations = A or B; Meets Expectations = C; Below Expectations = <C

** Typical writing assignment rubric attached

^ Quantitative assignment rubric attached

<i>Program Learning Objective (Relevant University Learning Goal)</i>	<i>Measurable Goal*</i>	<i>Student Competencies Specific to Goal</i>	<i>Tools to Assess Effectiveness</i>	<i>Courses for Evaluation</i>	<i>Evaluation Date</i>	<i>Next Round Evaluation Date</i>
PLO 1 - Qualitative** Environmental Literacy: Students are able to write a logical analytical paper using good writing style and construction supported by appropriate research. (Broad Integrative Knowledge & Applied Knowledge)	Introductory: Achieve basic to good level of research and writing in a 5-page paper	Assignments will require students: 1) understand and summarize material in relevant scholarly/technical articles and 2) identify basic solutions from an interdisciplinary standpoint.	Writing assignments	EnvS 001, EnvS 010		
	Intermediate: Achieve basic to good level of research and writing in an 8-page paper.	Assignments will require students: 1) perform a basic literature review and find 3-5 relevant scholarly/technical articles on an assigned topic and 2) analyze and evaluate 2 solutions against each other.	Writing assignments	EnvS 100W		
	Goal: Achieve good to excellent level of environmental research, writing and analysis in a 15-page paper.	Assignments will require students: 1) perform independent literature review on a self-chosen topic using 10-20 relevant scholarly/technical articles with little assistance and 2) perform critical interdisciplinary evaluations using criteria discussed in the course and provide recommendations for sustainable solutions.	Writing assignments	EnvS 117, EnvS 185, EnvS 198	March 2010	March 2014
PLO 2 - Quantitative^ Environmental Literacy: Students are able to determine, apply and interpret appropriate basic statistical or other quantitative analyses to environmental data (Intellectual Skills)	Introductory: Articulate and test hypotheses; read and understand graphs	Course material will require students read and understand basic statistics, such as t-tests, regression and ANOVA, or other analytical methods and complete simple analyses	Exams, Practicals	Stat 95, EnvS 010		
	Intermediate: Be able to determine correct test to use for a given research design	Students will be given study designs and data and will run and interpret different analytical tests; students will interpret analyses in journal articles	Exams, Practicals	EnvS 107, EnvS 110, EnvS 116, EnvS 152		
	Goal: Use and interpret numerical manipulations and statistics correctly in study designed test a hypothesis or specific research question	Students will be able design their own study to test a hypothesis or research question, collect data, run appropriate analyses (numerical, statistical, etc.) and interpret them; they will be able to read scholarly papers and be able to understand basic analytical methods, graphs and results.	Write up of methods and research analyses; tests, practicals	EnvS 198, Field Courses (except EnvS 118, 144 & 166) and Energy Courses	March 2011	March 2015
PLO 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 (Broad Integrative Knowledge & Applied Knowledge)	Introductory: Students know key sustainability terminology and principles, and important environmental challenges facing the planet.	Assignments will require students: 1) know core sustainability issues, 2) know key environmental challenges, and 3) know basic science and social science information about those issues	Writing assignments and exams	EnvS 001, EnvS 124		
	Intermediate: Students know basic natural science and social science information about important environmental challenges and are able to find and apply additional relevant information to analyze causes of environmental dilemmas.	Assignments will require students to: 1) to identify varying perspectives on key environmental issues, and 2) to find a range of information relevant to the issue, and 3) interpret that information to develop feasible solutions.	Writing assignments and exams	EnvS 100W, EnvS 107, EnvS 110		
	Goal: Students develop expertise in identifying complex environmental issues, find accurate natural science and social science information on all key aspects of those issues and are able to develop feasible, sustainable solutions using central principles of sustainability.	Assignments will require students: 1) master sustainability terminology, 2) identify subtle/complex environmental problems; 3) provide thorough information on all sides of the issue, 4) develop a considered, logical analysis with feasible solutions, and 5) clearly convey the issue, information and solutions in both written and verbal form.	Writing assignments, research projects, and exams	EnvS 117, EnvS 185, EnvS 198	March 2012	March 2016
PLO 4 - Professional Skills: 4A) Students are able to productively conduct group/team work to deliver professional quality presentations and reports (Intellectual Skills & Applied Knowledge) 4B) Students demonstrate professional work skills (Intellectual Skills) 4C) Students engage in community service and democratic participation (Social and Global Responsibilities)	4A Goal: Be able to work productively in a group work by dividing tasks and completing work which results in a high quality presentation and/or report	Students will be given or design complex projects in which they work in a team to complete the goals of the project including literature research, information collection, analysis, report writing and presentation. Students will demonstrate basic skills in word processing, spreadsheet, and presentation software, as well as an ability to locate and interpret data from a variety of sources.	Project quality; group evaluations	EnvS 152, EnvS 185, EnvS 198	March 2011	March 2015
	4B Goal: Demonstrate professional work skills and apply knowledge gained in the degree in a career setting	Students will find internships or other professional work opportunities that give them experience in a work environment and allow them to apply knowledge gained in their academic program.	Supervisor evaluations of work	EnvS 193, EnvS 194	March 2012	March 2016
	4C Goal: Build local environmental sustainability and democratic participation through community service	Students will undertake community service projects or participate in events, either on- or off-campus, that contribute to democratic institutions and promotes sustainability	Instructor evaluations of work	EnvS 185, EnvS 140, EnvS 181, EnvS 190, EnvS 191, EnvS 193	March 2012	March 2016
PLO 5 - BS Competency: Students demonstrate in-depth knowledge and skills in a science or technical field (Specialized Knowledge & Applied Knowledge)	Students will complete an Environmental Studies Concentration or minor in a science or technical field	Students will successfully complete the course of study in the chosen minor or concentration	Completion of minor or concentration	All courses in the minor or concentration		March 2013
PLO 6 - BA Competency: Students demonstrate in-depth knowledge and skills in a non-science field (Specialized Knowledge & Applied Knowledge)	Students will complete the Teacher Preparation BA, an Environmental Studies minor or minor in a non-science field	Students will successfully complete the course of study in the chosen EnvS or non-EnvS minor	Completion of minor	All courses in the minor		March 2013

Updated: 03/24/2014