SJSU Annual Program Assessment Form
Academic Year 2013-2014

Electronic copy of report is due June 1, 2014. Send to Undergraduate Studies (academicassessment@sjsu.edu), with cc: to your college's Associate Dean and college Assessment Facilitator. List of AFs is found at http://www.sjsu.edu/ugs/faculty/programs/committee/index.html**>**

Department: Environmental Studies
Program: MS
College: Social Sciences
Website: http://www.sjsu.edu/envs/
Addresses the University Learning Goals:
http://www.sjsu.edu/envs/department_assessment/index.html
Program Accreditation (if any): None
Contact Person and Email: Lynne Trulio; lynne.trulio@sjsu.edu
Date of Report: June 2014

Part A

1. **List of Program Learning Outcomes (PLOs)**

   Environmental Studies Graduate Program PLOs:

   The five PLOs for our Master of Science in Environmental Studies are attached in Appendix 1. At our yearly faculty retreat, we discuss PLO content, assessment criteria and the findings of the most recent Assessment Report. We determine changes to be made the program or courses to improve student learning and success in our programs.

2. **Map of PLOs to University Learning Goals (ULGs)**

   The links between the MS program PLOs and University Learning Goals are in Appendix 2. The department chair with the help of several faculty developed this map. The entire faculty will consider these links more fully at the summer 2014 faculty retreat.

3. **Alignment – Matrix of PLOs to Courses**

   The PLO matrix shows PLO-to-course alignment (see Appendix 1).

4. **Planning – Assessment Schedule**

   The PLO matrix in Appendix 1 gives our assessment schedule and our evaluation tools.

5. **Student Experience**

   New students entering our programs are provided with the Department PLOs and how they link to the mission of the department. The PLOs and their evaluation are on the department website in a clearly marked page. Student feedback has not been a part of department PLO development.

Part B

6. **Graduation Rates for Total, Non URM and URM students (per program and degree)**

Table 1 shows that approximately 40% of masters students complete their degree in 3 years. Our data show that of 7 students admitted in 2011, 5 (71.4%) finished within 3 years. We are pleased that so many students are completing their degree in this timeframe. Our degree is a thesis-based master of science, which requires significant self-motivation for students. While we have designed the program to be completed in a minimum of 2 years, only full-time funded students tend to meet that ideal. Factors contributing to longer stays include: 1) We admit some students as conditionally classified, and they must complete up to five additional undergraduate classes in order to remedy deficiencies in their undergraduate preparation; 2) We do not require that students attend full-time, as many students have jobs, families and other obligations. Our program is designed to be flexible to work with students' life needs; 3) In keeping with the CSU mandate to provide opportunity to non-traditional students at the graduate level, the department strives to be inclusive in admitting students who may need some extra support in developing their research objective and completing their thesis. We provide significant advising to help students achieve this goal, but some take longer than the target time to do so and lack of funding for graduate student tuition and research costs is a constraint.

Table 1. Graduation Rates for Total, Non-URM and URM Students by Program.

Academic Programs		First-time Freshmen: 6 Year Graduation Rates		New UG Transfers: 3 Year Graduation Rates		Grads : 3 Year Graduation Rates	
		Fall 2007 Cohort		Fall 2010 Cohort		Fall 2010 Cohort	
		Entering	% Grad	Entering	% Grad	Entering	% Grad
Environmental Studies	**Total**	**5**	**60.0%**	**34**	**32.4%**	**11**	**36.4%**
	URM	2	100.0%	8	25.0%	2	50.0%
	Non-URM	1	0.0%	17	29.4%	6	33.3%
	Other	2	50.0%	9	44.4%	3	33.3%

7. **Headcounts of program majors and new students (per program and degree)**

Table 2 shows the current headcount for majors and masters students from 2009 - 2013. While the number of undergraduate majors in Environmental Studies has grown, the number of masters students has stayed relatively constant, at approximately 36. This is the "carrying capacity", i.e. the limit for the number of MS students that can be supported by the current tenure-track faculty. Although we have been able to add two tenure-track faculty in the last 4 years, a combination of much increased undergraduate class sizes and advising loads, increase in Chair appointment due to department growth, a two-year leave for one full-time faculty member, and startup time-lag for newly hired faculty, have not yet permitted an increase in the number of graduate students. Thus, the teaching, research and advising loads of tenured/tenure-track faculty continue to constrain the number of graduate students we can serve.

Table 2. Number of Majors from Fall 2009 to Fall 2013

	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013
UG	169	185	235	217	257
MS	38	41	24	36	36
Total	207	226	259	253	293

8. **SFR and average section size (per program)**

In 2013-2014, the Department made a conscious effort to increase its overall SFR and data in Table 3 shows we were successful in that effort in Fall 2013. The Department is now exceeding the University SFR of 24.3 and expects to continue to increase SFR towards the College of Social Science average SFR of 27.3. While all this moves the Department in the direction of larger undergraduate class sizes, larger SFR also has the effect of reducing the time faculty have available to mentor graduate students since faculty must invest significant amounts of time in advising their MS students outside the graduate classes.

Table 3. SFR for Environmental Studies from Fall 2009-Fall 2013

SFR	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013
Lower Division	33.8	36.8	37.2	37.2	41.3
Upper Division	20.6	21.3	19.7	20.1	23.3
Graduate	12.7	12.9	9.4	9.6	10.9
Total	**23.0**	**23.4**	**23.2**	**23.4**	**25.7**

The average section size in graduate classes for the College of Social Sciences was 8.4 in Fall 2013 and ranged from 8.1 to 8.8 between 2009-2013. Environmental Studies graduate course section sizes have exceeded the College average since 2009. For the University overall, graduate course section size averaged 13.1 in Fall 2013. The Environmental Studies Master of Science program is a primary research, thesis-focused degree, and as such is expected to maintain smaller class sizes appropriate to supervision courses.

9. **Percentage of tenured/tenure-track instructional faculty (per department)**

In Fall 2013, tenured and probationary faculty were 54.5% of the instructional faculty (5.3 FTEF of 9.7 total FTEF). This percentage does not appear to differ greatly from SJSU's ratio in 2012 of 53.1%.

Part C

10. Closing the Loop/Recommended Actions

This past year we completed a 5-year program review. The review indicated that increasing the size of the master's program would be a goal to seek, if tenure-track faculty numbers improve. The faculty are also actively considering other approaches to increasing the size of the graduate program, given the limited resources provided by the university to support MS degrees. One concept under consideration is whether to develop a master of arts program that could be project, rather than thesis, based. However, Department thinking on this matter is in the very initial stages.

11. Assessment Data

This year we evaluated PLO 1 - Literature Review Skills: "Able to thoroughly review literature and research in a specific area of environmental studies and able to formulate original research questions based on critical analysis of aforementioned review". This objective is assessed in EnvS 297, Proposal Writing for Graduate Students. In this course, students must develop a proposal for the research they will undertake for their thesis. Having all three thesis committee members sign the proposal shows the student is ready, or nearly ready to implement their research. A signature by the chair shows the student has produced a viable draft proposal. No signatures indicates the student is some distance from implementing their research.

In 2011, when we last assessed this PLO, 86% of the enrolled students were able to gather the signatures of their full committees or a signature from their thesis chair. In 2013 and 2014, 67% and 80% of students, respectively, were able to achieve this goal (see Table 4).

Table 4. Number of EnvS 297 students getting signatures from thesis committee members on their draft proposal by the end of the semester

Year (n)	Full Committee	Chair Only	No Signatures
Spring 2011 (15)	2	10	2
Spring 2013 (12)	7	1	4
Spring 2014 (10)	1	7	2

12. Analysis

In 2011, we began a policy in EnvS 297 in which students could only receive the highest mark (A+) if all three committee members signed their thesis proposal before the end of the semester, and an "A" was reserved for those students who had their thesis signed by their thesis chair. Students unable to gather signatures on their thesis proposal by the end of the semester were limited to a maximum grade of "A-".

Faculty teaching these courses stated that students who did not get signatures on their proposal lacked working theoretical frameworks and/or their research questions were not well developed. Students who come to EnvS 297 without well developed research questions typically struggle to complete the proposal by the end of the semester.

13. Proposed changes and goals (if any)

While students who do not get signatures on their proposal by the end of EnvS 297 may still complete the degree in a timely manner, students cannot move forward with research without a proposal signed by the entire committee. The sooner students achieve this goal, the faster they will finish the degree. The faculty will discuss the results of this assessment at the annual retreat in Summer 2014 and will develop an appropriate response. Suggestions for actions may include:

a) Seeking ways to provide advisors support, such as assigned time, to support first-year graduate students.

b) Seeking ways to fund graduate students to reduce their work obligations outside of school.

Appendix 1. Environmental Studies MS PLOs

Master of Science Program Assessment Schedule

Degree Program(s):	Master of Science Program	**Department:**	Environmental Studies
Graduate Coordinator:	Rachel O'Malley (2012-present)	**Phone:**	4-5450 (Office)
Department Chair:	Lynne Trulio	**Phone:**	4-5450 (Office)
Report Prepared by:	Lynne Trulio	**Phone:**	4-5445 (Chair)

Program Learning Outcomes and Their Evaluation

	PLO Description	Evaluation Method	Evaluation Schedule	Evaluation Schedule
1	Literature Review Skills: Able to thoroughly review literature and research in a specific area of environmental studies and able to formulate original research questions based on critical analysis of aforementioned review	EnvS 297	Fall 2011-Spring 2012	Spring '14
2	Methods Development: Able to develop appropriate and feasible methods for original research project	EnvS 200	Fall 2010-Spring 2011	Spring '13
3	Knowledge of Environmental Thought: Possess thorough knowledge of the history of environmental thought	EnvS 250	Fall 2010-Spring 2011	Spring '15
4	Execute Research: Able to carry out original research plan and write a high quality scholarly thesis or professional report	Thesis Completion	Fall 2011-Spring 2012	Spring '16
5	Present Original Results: Able to present original research results in a public oral defense	Thesis Defense	Fall 2011-Spring 2012	Spring '17

Appendix 2. Environmental Studies MS Program Learning Outcomes (PLOs) mapped to appropriate University Learning Goals (ULGs)

ULG #1 - Specialized Knowledge

Depth of knowledge required for a degree, as identified by its program learning outcomes

MS PLO 1: Literature Review Skills: Able to thoroughly review literature and research in a specific area of environmental studies and able to formulate original research questions

MS PLO 4: Execute Research: Able to carry out original research plan and write a high quality scholarly thesis or professional report.

ULG #2 - Broad Integrative Knowledge

2.a. Mastery of each step of an investigative, creative, or practical project

MS PLO 4: Execute Research: Able to carry out original research plan and write a high quality scholarly thesis or professional report.

2.b. Understanding of the implications of results or findings from a particular work in societal context

MS PLO 4: Execute Research: Able to carry out original research plan and write a high quality scholarly thesis or professional report.

ULG #3 - Intellectual Skills

3.a. Fluency in the use of specific theories, tools, technology, and graphical representation

MS PLO 2: Methods Development: Able to develop appropriate and feasible methods for original research project.

MS PLO 4: Execute Research: Able to carry out original research plan and write a high quality scholarly thesis or professional report.

3.b. Skills and abilities necessary for life-long learning: critical and creative thinking effective communication, conscientious information gathering and processing, mastery of quantitative methodologies, and the ability to engage effectively in collaborative activities

MS PLO 4: Execute Research: Able to carry out original research plan and write a high quality scholarly thesis or professional report.

MS PLO 5: Present Original Results: Able to present original research results in a public oral defense

ULG #4 - Applied Knowledge

4.a. Ability to integrate theory, practice, and problem-solving to address practical issues

MS PLO 4: Execute Research: Able to carry out original research plan and write a high quality scholarly thesis or professional report.

4.b. Ability to apply their knowledge and skills to new settings or in addressing complex problems

MS PLO 4: Execute Research: Able to carry out original research plan and write a high quality scholarly thesis or professional report.

4.c. The ability to work productively and in groups

MS PLO: None

ULG #5 - Social and Global Responsibilities

5.a. Ability to act intentionally and ethically to address a global or local problem in an informed manner with a multicultural and historical perspective and a clear understanding of societal and civic responsibilities

MS PLO 3: Knowledge of Environmental Thought: Possess thorough knowledge of the history of environmental thought

5.b. Diverse and global perspectives through engagement with the multidimensional SJSU community

MS PLO: None