

Question 1: Program Learning Outcomes

Q1.1. Which of the following Program Learning Outcomes (PLOs) and Sac State Baccalaureate Learning Goals (BLGs) **did you assess in 2014-2015?** [Check all that apply]

- | | |
|-------------------------------------|-------------------------------------------------------------------------------------|
| <input type="checkbox"/> | 1. Critical thinking |
| <input type="checkbox"/> | 2. Information literacy |
| <input type="checkbox"/> | 3. Written communication |
| <input type="checkbox"/> | 4. Oral communication |
| <input type="checkbox"/> | 5. Quantitative literacy |
| <input type="checkbox"/> | 6. Inquiry and analysis |
| <input type="checkbox"/> | 7. Creative thinking |
| <input type="checkbox"/> | 8. Reading |
| <input type="checkbox"/> | 9. Team work |
| <input checked="" type="checkbox"/> | 10. Problem solving |
| <input type="checkbox"/> | 11. Civic knowledge and engagement |
| <input type="checkbox"/> | 12. Intercultural knowledge and competency |
| <input type="checkbox"/> | 13. Ethical reasoning |
| <input type="checkbox"/> | 14. Foundations and skills for lifelong learning |
| <input type="checkbox"/> | 15. Global learning |
| <input type="checkbox"/> | 16. Integrative and applied learning |
| <input type="checkbox"/> | 17. Overall competencies for GE Knowledge |
| <input type="checkbox"/> | 18. Overall competencies in the major/discipline |
| <input type="checkbox"/> | 19. Other, specify any PLOs that were assessed in 2014-2015 but not included above: |
| | a. |
| | b. |
| | c. |

Q1.3. Are your PLOs closely aligned with the mission of the university?

- ☒ 1. Yes
☐ 2. No
☐ 3. Don't know

Q1.4. Is your program externally accredited (other than through WASC)?

- ☐ 1. Yes
☒ 2. No (Go to **Q1.5**)
☐ 3. Don't know (Go to **Q1.5**)

Q1.4.1. If the answer to Q1.4 is yes, are your PLOs closely aligned with the mission/goals/outcomes of the accreditation agency?

- ☐ 1. Yes
☐ 2. No
☐ 3. Don't know

Q1.5. Did your program use the [Degree Qualification Profile](#) (DQP) to develop your PLO(s)?

- ☐ 1. Yes
☐ 2. No, but I know what the DQP is
☒ 3. No, I don't know what the DQP is.
☐ 4. Don't know

Q1.6. Did you use action verbs to make each PLO measurable (See Attachment I)? **YES**

Q1.2. Please provide more detailed background information about **EACH PLO** you checked above and other information such as how your specific PLOs were **explicitly** linked to the Sac State BLGs:

The MS CE program has four Program Educational Objectives (PEO = PLO):

- A. Succeed in professional employment at their chosen specialty of environmental, geotechnical, structural, transportation, or water resources engineering.
- B. Identify, analyze, and solve complex practical civil engineering problems in their chosen field of specialty.
- C. Communicate effectively about technically complex engineering problems to peers, other professionals, decision makers, and the general public, in the conduct of their work.

Q1.2.1. Do you have rubrics for your PLOs?

- ☐ 1. Yes, for all PLOs
☐ 2. Yes, but for some PLOs
☒ 3. No rubrics for PLOs
☐ N/A, other (please specify):

IN QUESTIONS 2 THROUGH 5, REPORT IN DETAIL ON ONE PLO THAT YOU ASSESSED IN 2014-2015

Question 2: Standard of Performance for the selected PLO

Q2.1. Specify one PLO here as an example to illustrate how you conducted assessment (be sure you checked the correct box for this PLO in Q1.1):

A. Identify, analyze, and solve complex practical civil engineering problems in their chosen field of specialty.

Q2.2. Has the program developed or adopted **explicit** standards of performance for this PLO?

- ☒ 1. Yes
☐ 2. No
☐ 3. Don't know
☐ 4. N/A

Q2.3. Please provide the rubric(s) and standard of performance that you have developed for this PLO here or in the appendix: [Word limit: 300]

Standard of performance is 80% of student (overall/final) grades are a B- or better in graduate work.

Q2.4. Please indicate the category in which the selected PLO falls into.

- ☐ 1. Critical thinking
☐ 2. Information literacy
☐ 3. Written communication
☐ 4. Oral communication
☐ 5. Quantitative literacy
☐ 6. Inquiry and analysis
☐ 7. Creative thinking
☐ 8. Reading
☐ 9. Team work
☒ 10. Problem solving
☐ 11. Civic knowledge and engagement
☐ 12. Intercultural knowledge and competency
☐ 13. Ethical reasoning
☐ 14. Foundations and skills for lifelong learning
☐ 15. Global learning
☐ 16. Integrative and applied learning
☐ 17. Overall competencies for GE Knowledge
☐ 18. Overall competencies in the major/discipline
☐ 19. Other:

Please indicate where you have published the PLO, the standard of performance, and the rubric that measures the PLO:

| | Q2.5 | Q2.6 | Q2.7 |
|------------------------------------------------------------------------------------------------|---------|------------------------------|-------------|
| | (1) PLO | (2) Standards of Performance | (3) Rubrics |
| 1. In SOME course syllabi/assignments in the program that address the PLO | | | |
| 2. In ALL course syllabi/assignments in the program that address the PLO | | | |
| 3. In the student handbook/advising handbook | | | |
| 4. In the university catalogue | | | |
| 5. On the academic unit website or in newsletters | | | |
| 6. In the assessment or program review reports, plans, resources or activities | X | | |
| 7. In new course proposal forms in the department/college/university | | | |
| 8. In the department/college/university's strategic plans and other planning documents | | | |
| 9. In the department/college/university's budget plans and other resource allocation documents | | | |
| 10. Other, specify: | | | |

Question 3: Data Collection Methods and Evaluation of Data Quality for the Selected PLO

Q3.1. Was assessment data/evidence **collected** for the selected PLO in 2014-2015?

- ☒ 1. Yes
☐ 2. No (Skip to **Q6**)
☐ 3. Don't know (Skip to **Q6**)
☐ 4. N/A (Skip to **Q6**)

Q3.2. If yes, was the data **scored/evaluated** for this PLO in 2014-2015?

- ☒ 1. Yes
☐ 2. No (Skip to **Q6**)
☐ 3. Don't know (Skip to **Q6**)
☐ 4. N/A (Skip to **Q6**)

Q3.1A. How many assessment tools/methods/measures **in total** did you use to assess this PLO?

One. Final grade in our graduate classes during 14-15.

Q3.2A Please describe how you collected the assessment data for the selected PLO. For example, in what course(s) or by what means were data collected (see Attachment II)? **[Word limit: 300]**

All graduate courses

Q3A: Direct Measures (key assignments, projects, portfolios)

Q3.3. Were direct measures [key assignments, projects, portfolios, etc.] used to assess this PLO?

- ☒ 1. Yes
☐ 2. No (Go to **Q3.7**)
☐ 3. Don't know (Go to **Q3.7**)

Q3.3.1. Which of the following direct measures were used? **[Check all that apply]**

- ☐ 1. Capstone projects (including theses, senior theses), courses, or experiences
☐ 2. Key assignments from required classes in the program
☐ 3. Key assignments from elective classes
☐ 4. Classroom based performance assessments such as simulations, comprehensive exams, critiques
☐ 5. External performance assessments such as internships or other community based projects
☐ 6. E-Portfolios
☐ 7. Other portfolios
☒ 8. Other measure. Specify: **Final grades in graduate program**

Q3.3.2. Please attach the direct measure you used to collect data.

Final grades in graduate classes

Q3.4. How was the data evaluated? **[Select only one]**

- ☒ 1. **No** rubric is used to interpret the evidence (Go to **Q3.5**)
☐ 2. Used rubric developed/modified by the faculty who teaches the class
☐ 3. Used rubric developed/modified by a group of faculty
☐ 4. Used rubric pilot-tested and refined by a group of faculty
☐ 5. The VALUE rubric(s)
☐ 6. Modified VALUE rubric(s)
☐ 7. Used other means. Specify:

Q3.4.1. Was the direct measure (e.g. assignment, thesis, etc.) aligned directly and explicitly with the PLO?

- ☒ 1. Yes
☐ 2. No
☐ 3. Don't know
☐ 4. N/A

Q3.4.2. Was the direct measure (e.g. assignment, thesis, etc.) aligned directly and explicitly with the rubric?

- ☐ 1. Yes
☐ 2. No
☐ 3. Don't know
☒ 4. N/A

Q3.4.3. Was the rubric aligned directly and explicitly with the PLO?

- ☒ 1. Yes
☐ 2. No
☐ 3. Don't know
☐ 4. N/A

Q3.5. How many faculty members participated in planning the assessment data collection of the selected PLO?

Q3.5.1. If the data was evaluated by multiple scorers, was there a norming process (a procedure to make sure everyone was

| | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| This was not discussed by the faculty. | | scoring similarly)? <input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No <input type="checkbox"/> 3. Don't know | |
| Q3.6. How did you select the sample of student work [papers, projects, portfolios, etc.]? All grades selected | | Q3.6.1. How did you decide how many samples of student work to review? NA | |
| Q3.6.2. How many students were in the class or program? About 50 in the MS program at various stages. | Q3.6.3. How many samples of student work did you evaluate? All classes | Q3.6.4. Was the sample size of student work for the direct measure adequate? <input checked="" type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No <input type="checkbox"/> 3. Don't know | |
| Q3B: Indirect Measures (surveys, focus groups, interviews, etc.) | | | |
| Q3.7. Were indirect measures used to assess the PLO? <input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No (Skip to Q3.8) <input type="checkbox"/> 3. Don't know | | Q3.7.1. Which of the following indirect measures were used? [Check all that apply] <input type="checkbox"/> 1. National student surveys (e.g., NSSE) <input type="checkbox"/> 2. University conducted student surveys (e.g. OIR) <input type="checkbox"/> 3. College/Department/program student surveys <input type="checkbox"/> 4. Alumni surveys, focus groups, or interviews <input type="checkbox"/> 5. Employer surveys, focus groups, or interviews <input type="checkbox"/> 6. Advisory board surveys, focus groups, or interviews <input type="checkbox"/> 7. Other, specify: | |
| Q3.7.2 If surveys were used, how was the sample size decided? | | | |
| Q3.7.3. If surveys were used, briefly specify how you selected your sample. | | Q3.7.4. If surveys were used, what was the response rate? | |
| Q3C: Other Measures (external benchmarking, licensing exams, standardized tests, etc.) | | | |
| Q3.8. Were external benchmarking data such as licensing exams or standardized tests used to assess the PLO? <input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No (Go to Q3.8.2) <input type="checkbox"/> 3. Don't know | | Q3.8.1. Which of the following measures were used? <input type="checkbox"/> 1. National disciplinary exams or state/professional licensure exams <input type="checkbox"/> 2. General knowledge and skills measures (e.g., CLA, CAAP, ETS PP, etc.) <input type="checkbox"/> 3. Other standardized knowledge and skill exams (e.g., ETS, GRE, etc.) <input type="checkbox"/> 4. Other, specify: | |
| Q3.8.2. Were other measures used to assess the PLO? <input type="checkbox"/> 1. Yes <input checked="" type="checkbox"/> 2. No (Go to Q3.9) <input type="checkbox"/> 3. Don't know (Go to Q3.9) | | Q3.8.3. If other measures were used, please specify: | |
| Q3D: Alignment and Quality | | | |
| Q3.9. Did the data, including the direct measures, from all the different assessment tools/measures/methods directly align with the PLO? | | Q3.9.1. Were ALL the assessment tools/measures/methods that were used good measures for the PLO? | |

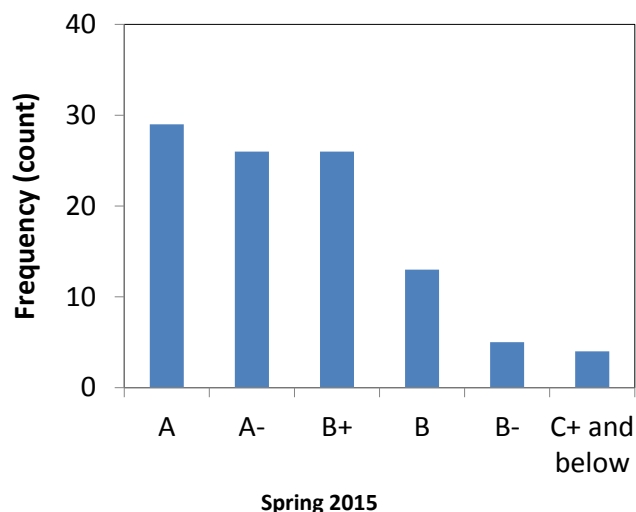
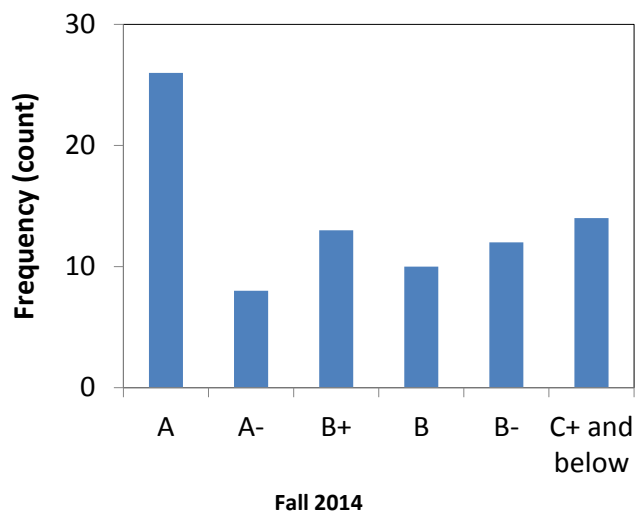
- | | |
|-------------------------------------|---------------|
| <input checked="" type="checkbox"/> | 1. Yes |
| <input type="checkbox"/> | 2. No |
| <input type="checkbox"/> | 3. Don't know |

- | | |
|-------------------------------------|---------------|
| <input checked="" type="checkbox"/> | 1. Yes |
| <input type="checkbox"/> | 2. No |
| <input type="checkbox"/> | 3. Don't know |

Question 4: Data, Findings and Conclusions

Q4.1. Please provide simple tables and/or graphs to summarize the assessment data, findings, and conclusions: (see Attachment III)
[Word limit: 600 for selected PLO]

The figures below show the grade distribution of all students who enrolled in an MS civil engineering class during Fall 2014 and Spring 2015. In Fall 2014, 83% of students received a grade of B- or better and in Spring 2015, 96% of students received



Q4.2. Are students doing well and meeting program standard? If not, how will the program work to improve student performance of the selected PLO?

Yes. Students are meeting the program standard as 90% of students, on average between the two semesters, received a grade of B- or higher in the 2014-2015 graduate offerings.

Q4.3. For **selected** PLO, the student performance:

- | | |
|-------------------------------------|--------------------------------------------------|
| <input checked="" type="checkbox"/> | 1. Exceeded expectation/standard |
| <input type="checkbox"/> | 2. Met expectation/standard |
| <input type="checkbox"/> | 3. Partially met expectation/standard |
| <input type="checkbox"/> | 4. Did not meet expectation/standard |
| <input type="checkbox"/> | 5. No expectation or standard has been specified |
| <input type="checkbox"/> | 6. Don't know |

Question 5: Use of Assessment Data (Closing the Loop)

Q5.1. As a result of the **assessment effort in 2014-2015** and based on the prior feedback from OAPA, do you anticipate making any changes for your program (e.g., course structure, course content, or modification of PLOs)?

- ☐ 1. Yes
☒ 2. No (Go to **Q6**)
☐ 3. Don't know (Go to **Q6**)

Q5.1.2. Do you have a plan to assess the impact of the changes that you anticipate making?

- ☐ 1. Yes
☒ 2. No
☐ 3. Don't know

Q5.1.1. Please describe what changes you plan to make in your program as a result of your assessment of this PLO. Include a description of how you plan to assess the impact of these changes. **[Word limit: 300 words]**

No significant changes.

Q5.2. How have the assessment data from last year (**2013 - 2014**) been used so far? **[Check all that apply]**

| | (1) Very Much | (2) Quite a Bit | (3) Some | (4) Not at all | (8) N/A |
|----------------------------------------------------|---------------------|--------------------|-------------|-------------------|------------|
| 1. Improving specific courses | | | | X | |
| 2. Modifying curriculum | | | | X | |
| 3. Improving advising and mentoring | | | | X | |
| 4. Revising learning outcomes/goals | | | | X | |
| 5. Revising rubrics and/or expectations | | | | X | |
| 6. Developing/updating assessment plan | | | | X | |
| 7. Annual assessment reports | | | | X | |
| 8. Program review | | | | X | |
| 9. Prospective student and family information | | | | X | |
| 10. Alumni communication | | | | X | |
| 11. WASC accreditation (regional accreditation) | | | | X | |
| 12. Program accreditation | | | | X | |
| 13. External accountability reporting requirement | | | | X | |
| 14. Trustee/Governing Board deliberations | | | | X | |
| 15. Strategic planning | | | | X | |
| 16. Institutional benchmarking | | | | X | |
| 17. Academic policy development or modification | | | | X | |
| 18. Institutional Improvement | | | | X | |
| 19. Resource allocation and budgeting | | | | X | |
| 20. New faculty hiring | | | | X | |
| 21. Professional development for faculty and staff | | | | X | |
| 22. Recruitment of new students | | | | X | |

23. Other Specify:

Q5.2.1. Please provide a detailed example of how you used the assessment data above.

Additional Assessment Activities

Q6. Many academic units have collected assessment data on aspects of a program that are not related to PLOs (i.e., impacts of an advising center, etc.). If your program/academic unit has collected data on the program elements, please briefly report your results here. [Word limit: 300]

Q7. What PLO(s) do you plan to assess next year?

- | | |
|-------------------------------------|-------------------------------------------------------------------------------------|
| <input type="checkbox"/> | 1. Critical thinking |
| <input type="checkbox"/> | 2. Information literacy |
| <input checked="" type="checkbox"/> | 3. Written communication |
| <input type="checkbox"/> | 4. Oral communication |
| <input type="checkbox"/> | 5. Quantitative literacy |
| <input type="checkbox"/> | 6. Inquiry and analysis |
| <input type="checkbox"/> | 7. Creative thinking |
| <input type="checkbox"/> | 8. Reading |
| <input type="checkbox"/> | 9. Team work |
| <input type="checkbox"/> | 10. Problem solving |
| <input type="checkbox"/> | 11. Civic knowledge and engagement |
| <input type="checkbox"/> | 12. Intercultural knowledge and competency |
| <input type="checkbox"/> | 13. Ethical reasoning |
| <input type="checkbox"/> | 14. Foundations and skills for lifelong learning |
| <input type="checkbox"/> | 15. Global learning |
| <input type="checkbox"/> | 16. Integrative and applied learning |
| <input type="checkbox"/> | 17. Overall competencies for GE Knowledge |
| <input type="checkbox"/> | 18. Overall competencies in the major/discipline |
| <input type="checkbox"/> | 19. Other, specify any PLOs that were assessed in 2014-2015 but not included above: |
| | a. |
| | b. |
| | c. |

Q8. Have you attached any appendices? If yes, please list them all here:

Program Information

| | | | | | | | | | | | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--------------------------|--------------------------------------|--------------------------|---------------|-------------------------------------|--------------------|--------------------------|---------------------------|--------------------------|---------------------------|
| P1. Program/Concentration Name(s): MS in Civil Engineering P1.1. Report Authors: Benjamin Fell (current chair) | | | | | P2. Program Director: Saad Merayyan (in 2014-2015) Ed Dammel (2015-2016) P2.1. Department Chair: Kevan Shafizadeh (chair in 2014-2015) | | | | | | | | | | | | | | |
| P3. Academic unit: Department, Program, or College: Department of Civil Engineering | | | | | P4. College: Engineering and Computer Science | | | | | | | | | | | | | | |
| P5. Fall 2014 enrollment for Academic unit (See Department Fact Book 2014 by the Office of Institutional Research for fall 2014 enrollment: Fall 2014 (from Fall 2015 Factbook): 58 | | | | | P6. Program Type: [Select only one] <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30px;"><input type="checkbox"/></td> <td>1. Undergraduate baccalaureate major</td> </tr> <tr> <td><input type="checkbox"/></td> <td>2. Credential</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>3. Master's degree</td> </tr> <tr> <td><input type="checkbox"/></td> <td>4. Doctorate (Ph.D./Ed.d)</td> </tr> <tr> <td><input type="checkbox"/></td> <td>5. Other. Please specify:</td> </tr> </table> | | | | | <input type="checkbox"/> | 1. Undergraduate baccalaureate major | <input type="checkbox"/> | 2. Credential | <input checked="" type="checkbox"/> | 3. Master's degree | <input type="checkbox"/> | 4. Doctorate (Ph.D./Ed.d) | <input type="checkbox"/> | 5. Other. Please specify: |
| <input type="checkbox"/> | 1. Undergraduate baccalaureate major | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | 2. Credential | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | 3. Master's degree | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | 4. Doctorate (Ph.D./Ed.d) | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | 5. Other. Please specify: | | | | | | | | | | | | | | | | | | |
| Undergraduate Degree Program(s): P7. Number of undergraduate degree programs the academic unit has: 1 P7.1. List all the name(s): BS in Civil Engineering P7.2. How many concentrations appear on the diploma for this undergraduate program? 0 | | | | | Master Degree Program(s): P8. Number of Master's degree programs the academic unit has: 1 P8.1. List all the name(s): MS in Civil Engineering P8.2. How many concentrations appear on the diploma for this master program? 5 | | | | | | | | | | | | | | |
| Credential Program(s): P9. Number of credential programs the academic unit has: 0 P9.1. List all the names: | | | | | Doctorate Program(s) P10. Number of doctorate degree programs the academic unit has: 0 P10.1. List all the name(s): | | | | | | | | | | | | | | |

| When was your assessment plan? | 1. Before 2007-08 | 2. 2007-08 | 3. 2008-09 | 4. 2009-10 | 5. 2010-11 | 6. 2011-12 | 7. 2012-13 | 8. 2013-14 | 9. 2014-15 | 10. No formal plan |
|--------------------------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------|
| P11. Developed | | | | | X | | | | | |
| P12. Last updated | | | | | X | | | | | |

| | 1. Yes | 2. No | 3. Don't Know |
|---------------------------------------------------------------------------------------------------------------------|--------|-------|---------------|
| P13. Have you developed a curriculum map for this program? | | X | |
| P14. Has the program indicated explicitly where the assessment of student learning occurs in the curriculum? | | X | |
| P15. Does the program have any capstone class? | X | | |
| P16. Does the program have ANY capstone project? | X | | |