Closing the Loop Annual Assessment Report

Department _______Computer Science___________  College _____CoSE_____________________________

Degree Program______BS in Computer Science_____________________________

Use of Assessment for Program Improvement and Planning, or, Closing the Loop Rubric –
developed and used by the University Academic Assessment Advisory Committee (UAAAC) to provide
feedback to programs about their use of assessment findings to improve their programs.

The quality of a program’s assessment is determined by its usefulness and application. While assessment
should reveal a program’s strengths, it is equally (and perhaps even more) valuable if it can help
programs identify, reflect on, and address areas where continued development and improvement are
needed.

<table>
<thead>
<tr>
<th>DEVELOPED</th>
<th>DEVELOPING</th>
<th>NEEDS DEVELOPMENT</th>
<th>ABSENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment clearly drives program planning and curriculum development</td>
<td>Assessment results directed toward program planning</td>
<td>Assessment describes the existing program</td>
<td>No use of assessment evident</td>
</tr>
<tr>
<td>Program improvements result from assessment</td>
<td>Program’s curriculum has changed (and changes) as a result of assessment</td>
<td>Assessment used to defend status quo</td>
<td></td>
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<tr>
<td>Evidence of program-level reflection on assessment results</td>
<td>Assessment report includes reflection on larger lessons learned from assessment</td>
<td>Assessment is primarily procedural and needs reflection</td>
<td></td>
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</tbody>
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1. Please list the program learning goal that was assessed in your assessment findings report or other
assessment activity.

PLO 1: Students will be able to design, develop, document, and test software using current techniques.

2. What was the finding of that assessment?

- DFW rates for CSC 210 are higher than we would like (avg. 34%), and varies significantly across
sections/instructors
- SETE scores are also highly variable across sections/instructors
- Students who take 210 with 211 have significantly better grades than students who take 210 without
211

<table>
<thead>
<tr>
<th></th>
<th>GPA for 210 w. 211 (CR)</th>
<th>GPA for 211 w/o 211 (or NC in 211)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F15</td>
<td>2.74</td>
<td>2.18</td>
</tr>
<tr>
<td>S16</td>
<td>2.64</td>
<td>2.18</td>
</tr>
<tr>
<td>F16</td>
<td>2.81</td>
<td>2.13</td>
</tr>
<tr>
<td>S17</td>
<td>3.03</td>
<td>1.81</td>
</tr>
</tbody>
</table>

- Both San Jose State and CSU LA require a lab component with their Introduction to Programming
courses
3. What was the process through which faculty considered a response to the findings of the assessment (department meeting, department retreat, through a department assessment or curriculum committee)?

The overall strategy was discussed at a department retreat and the details of the proposed changes were fleshed out by a curriculum committee.

4. What changes have you made or are you planning to make in order to address the findings?

- To strengthen the introductory course CSC 210, the accompanying lab CSC 211 (1 unit), previously optional, has been made mandatory starting Fall 2019.
- To maintain unit count, the one-unit lab CSC 412 was removed from the program requirements.
- The 3-unit Science Elective, essentially a restriction of GE B2 to Biol 100 or Biol 176 was from an accreditation visit from the 90s. The concerns leading to the introduction of the restriction are no longer valid; hence we decided to remove the restriction. CS majors will be able to take any of the GE B2 options available to other SFSU undergraduates.
- Web application development has become an essential part of the skillset of all software engineers. An updated, expanded and required course covering web development/technologies is essential to maintain currency for our BS program. Hence we have added the 3-unit CSC 317 as a requirement for the BS major. Since we removed the 3-unit Science Elective from our BS major requirements, this does not result in changes in our total major unit count.

5. What assessment activities do you plan to undertake next academic year?

- Will you assess a different program learning goal (assessment finding report)?
  No
- Will you address another finding from the assessment of the same program learning goal (closing the loop report)?
  Yes. We plan to remove the Phys 230/232 requirement in favor of strengthening the core CS curriculum. The curriculum committee is investigating ways to accomplish this without violating ABET accreditation requirements.
- Is it time to revisit program learning goals (program learning goals report) or your curriculum map (curriculum map report)?
  No