Department of Statistics and Biostatistics, CSCI

ASSESSMENT PLAN: B.S in Statistics
Updated Date: Winter 2015, By Lynn Eudey

PROGRAM MISSION
CSUEB Missions, Commitments, and ILOs, 2012

CSUEB Department of Statistics and Biostatistics Mission Statement
The California State University, East Bay Department of Statistics and Biostatistics aims to provide a strong education in statistics and biostatistics that prepares its students with both theoretical and practical training to function and thrive in our society in roles such as statisticians, biostatisticians, statistical programmers, and data analysts. We also strive to equip non-major students with a better understanding of the quantitative aspects of academia, business and industry.

PROGRAM STUDENT LEARNING OUTCOMES (SLOs)

Students graduating with a B.S. in Statistics will be able to:

<table>
<thead>
<tr>
<th>SLO</th>
<th>ILO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1, 6</td>
<td>apply basic computational skill in descriptive statistics and graphical displays; hypothesis testing and confidence intervals; modeling and error analysis</td>
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<tr>
<td>2</td>
<td>1, 2, 3, 4, 6</td>
<td>communicate to others results involving descriptive statistics and graphical displays; hypothesis testing and confidence intervals; modeling and error analysis</td>
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<tr>
<td>3</td>
<td>1, 2, 6</td>
<td>Analyze data using appropriate statistical computer software and to interpret the results covering descriptive statistics and graphical displays; hypothesis testing and confidence intervals; modeling and error analysis</td>
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Year 1: 2013-2014

1. Which SLO(s) to assess
   SLO’s 1 -3 will be assessed

2. Assessment indicators
   Written/oral project. Using a rubric to determine assessment.

3. Sample (courses/# of students)
   To be determined by faculty

4. Time (which quarter(s))
   To be determined by faculty

5. Responsible person(s)
   All tenured faculty

6. Ways of reporting (how, to who)
   To be determined

7. Ways of closing the loop
   Relevant faculty will brainstorm and implement improved course materials and curriculum for SLO’s in which student
### Year 2: 2014-2015

1. **Which SLO(s) to assess**
   - All three SLOs.

2. **Assessment indicators**
   - Rubric assessment of written/oral project

3. **Sample (courses/# of students)**
   - STAT 4601 – required senior course for all Statistics BS students

4. **Time (which quarter(s))**
   - Spring 2015

5. **Responsible person(s)**
   - YanYan Zhou

6. **Ways of reporting (how, to who)**
   - YanYan Zhou collects the data from the course and writes a report to the chair.

7. **Ways of closing the loop**
   - Relevant faculty will brainstorm and implement improved course materials and curriculum for SLO’s in which student performance does not meet expectations.

### Year 3: 2015-2016

1. **Which SLO(s) to assess**
   - All three SLOs.

2. **Assessment indicators**
   - Rubric assessment of written/oral project in

3. **Sample (courses/# of students)**
   - STAT 4601 – required senior course for all Statistics BS students

4. **Time (which quarter(s))**
   - Spring 2016

5. **Responsible person(s)**
   - YanYan Zhou

6. **Ways of reporting (how, to who)**
   - YanYan Zhou collects the data from the course and writes a report to the chair.

7. **Ways of closing the loop**
   - Relevant faculty will brainstorm and implement improved course materials and curriculum for SLO’s in which student performance does not meet expectations.

### Year 4: 2016-2017

1. **Which SLO(s) to assess**
   - All three SLOs.

2. **Assessment indicators**
   - Rubric assessment of written/oral project in

3. **Sample (courses/# of students)**
   - STAT 4601 – required senior course for all Statistics BS students

4. **Time (which quarter(s))**
   - Spring 2017

5. **Responsible person(s)**
   - YanYan Zhou

6. **Ways of reporting (how, to who)**
   - YanYan Zhou collects the data from the course and writes a report to the chair.

7. **Ways of closing the loop**
   - Relevant faculty will brainstorm and implement improved course materials and curriculum for SLO’s in which student performance does not meet expectations.

### Year 5: 2017-2018

1. **Which SLO(s) to assess**
   - All three SLOs.

2. **Assessment indicators**
   - Rubric assessment of written/oral project in

3. **Sample (courses/# of students)**
   - STAT 4601 – required senior course for all Statistics BS students

4. **Time (which quarter(s))**
   - Spring 2017

5. **Responsible person(s)**
   - YanYan Zhou
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<th><strong>6. Ways of reporting (how, to who)</strong></th>
<th>YanYan Zhou collects the data from the course and writes a report to the chair.</th>
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<td><strong>7. Ways of closing the loop</strong></td>
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