SJSU Annual Program Assessment Form  
Academic Year 2013-2014

Department: Design  
Program: Industrial Design  
College: Humanities and Arts  
Website: http://www.sjsu.edu/design/design_programs/industrial_design_program/  
Check here if your website addresses the University Learning Goals.

Program Accreditation (if any): NASAD

Contact Person and Email: Leslie Speer, Leslie.Speer@sjsu.edu

Date of Report: June 1, 2014

Part A

1. **List of Program Learning Outcomes (PLOs)**
   
   In recognition of the increasing complexity of the creative, economic, and technological state locally, regionally, and internationally, the BSID Program is committed to educating creative innovators whose background and skills can adapt to the constantly changing demands of our global industry. Specifically, the BSID Program is committed to educate designers who are able to:

   1. **Demonstrate a functional knowledge of formal visual elements and organizing principles as they apply to the design of aesthetically pleasing and appropriate products and environments.**
   2. **Articulate a functional understanding of manufactured products.** This includes being able to explain to others how products work, what constitutes their structural integrity, and what materials and manufacturing processes are required to produce them.
   3. **Describe what makes a product useful, usable, and desirable to specific segments of the human population.**
   4. **Explain the design process to others.** They will be able to explain how designers define problems, research pertinent issues, identify variables and requirements, conceptualize and evaluate alternatives; and test and refine solutions.
   5. **Investigate, analyze, synthesize, and make design decisions based on an ecological understanding of the impact of a design.** This involves reconciling the priorities and concerns of end users with those of business, society, and the environment.
   6. **Demonstrate the verbal and visual abilities to develop and communicate design concepts and specifications.** This includes rapid visualization, presentation drawing, three-dimensional sketch mockups, functional prototyping, and appearance model-making.
   7. **Demonstrate an ability to conceptualize, develop, and communicate design concepts and specifications utilizing current 2D and 3D software and techniques.**
   8. **Describe Industrial Design to others and place it in the context of history, business, and professional practice.**
   9. **Apply the concept of social civility to the design and manufacture of products and environments.**
   10. **Apply their knowledge of end-user psychology, anthropometry, and user interaction to the design of manufactured products.**
   11. **Employ functional knowledge of ergonomic, behavioral, and market research**
methodologies to the design of manufactured artifacts.

2. Map of PLOs to University Learning Goals (ULGs)
   Summary Table
   BSID Program Outcomes Mapped to University Goals for All BSID Students

<table>
<thead>
<tr>
<th>ULG to PLO Map</th>
<th>Specialized Knowledge</th>
<th>Broad Integrative Knowledge</th>
<th>Intellectual Skills</th>
<th>Applied Knowledge</th>
<th>Social and Global Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS Industrial Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring 2014</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

PLO (down) / ULG (right)

- PLO #1: Functional knowledge; visual aesthetics
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

- PLO #2: Manufactured products; structure, mechanics, materials & processes
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

- PLO #3: Usability; desirability; user/customer needs
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

- PLO #4: Design Process; define problems; research; identify; evaluate; test; refine
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

- PLO #5: Ecological/environmental impacts on users, business, society, environment
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

- PLO #6: Verbal and visual tools to communicate design concepts (draw, mockup, model, prototype)
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

- PLO #7: Conceptualize and develop using current 2D/3D software and technology
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

- PLO #8: Describe ID to others; place in context (history, industry, professional practice)
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

- PLO #9: Social Civility applied to mfg. of products and environments/experiences
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

- PLO #10: End-user psychology; anthropometry; user interaction
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

- PLO #11: Ergonomic; behavioral; market research applied to artifacts
  - Specialized Knowledge: x
  - Broad Integrative Knowledge: x
  - Intellectual Skills: x
  - Applied Knowledge: x
  - Social and Global Responsibility: x

3. Alignment – Matrix of PLOs to Courses
4. Planning – Assessment Schedule

**Fall 2014:**
- Engage in Program self-study.
• Drive development and implement transparency in *Comprehensive List and Learning Outcomes* so that both faculty and students are able to easily access information that is pertinent to these areas.

**Spring 2015:**
• Complete shift to transparent communication of objectives.
• Continue Program conversation on: courses in which objectives will be met; pedagogical strategies suitable for these objectives; courses in which students can assess their own skill level on the objectives; ways of assessing these new objectives; and appropriate data collection in portfolio review courses.

**Fall 2015:**
• Begin implementation of new assessment plan.
• Roll out new, more detailed, curriculum maps.
• Develop metrics for the new objectives.
• Continue discussion within program.

**Spring 2016:**
• Test metrics
• Develop and disseminate policy documents for courses in which data will be collected for assessment purposes.

**Fall 2016:**
• Revise metrics based on Spring 2015 results.

5. **Student Experience**

PLO’s and Course Learning Objectives are detailed in Syllabi for every course in the Industrial Design Program. These Syllabi are posted on the Design Dept. Website.

**Part B**

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

For Design Department:

<table>
<thead>
<tr>
<th>Academic Programs</th>
<th>First-time Freshmen: 6 Year Graduation Rates</th>
<th>New UG Transfers: 3 Year Graduation Rates</th>
<th>Grad: 3 Year Graduation Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall 2007 Cohort</td>
<td>Fall 2010 Cohort</td>
<td>Fall 2010 Cohort</td>
</tr>
<tr>
<td>Design</td>
<td>Entering</td>
<td>% Grad</td>
<td>Entering</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>31.6%</td>
<td>154</td>
</tr>
<tr>
<td>URM</td>
<td>4</td>
<td>0.0%</td>
<td>32</td>
</tr>
<tr>
<td>Non-URM</td>
<td>12</td>
<td>50.0%</td>
<td>92</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>0.0%</td>
<td>30</td>
</tr>
</tbody>
</table>

For Industrial Design (from IEA):

<table>
<thead>
<tr>
<th>Academic Programs: Industrial Design</th>
<th>First-time Freshmen: 6 Year Graduation Rates</th>
<th>New UG Transfers: 3 Year Graduation Rates</th>
<th>Grad: 3 Year Graduation Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall 2007 Cohort</td>
<td>Fall 2010 Cohort</td>
<td>Fall 2010 Cohort</td>
</tr>
<tr>
<td>Total</td>
<td>Entering</td>
<td>% Grad</td>
<td>Entering</td>
</tr>
<tr>
<td>URM</td>
<td>3</td>
<td>33.3%</td>
<td>3</td>
</tr>
<tr>
<td>Non-URM</td>
<td>10</td>
<td>40.0%</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. **Headcounts of program majors and new students (per program and degree)**

Based on current statistics from the Admissions office, the headcount enrollment for Fall 2014 should be between 245-255. Over the last four years the headcount enrollment in majors has increased from 137 (2009) to 154 (2010) to 200 (2011) to 177 (2012) and then to 221 (2013). This is an almost 100% increase in headcount in the last 5 years.

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

Note: We don’t have a Graduate Program in Industrial Design so we are not clear where the numbers above come from.

Other relevant information:

Fall 2013 Total FTES: Lower Division: 33; Upper Division: 51.8
Fall 2013 Total FTEF: Lower Division: 2.5; Upper Division: 4.1

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

10. **Closing the Loop/Recommended Actions**

The last four years have delivered multiple challenges for the newly formed Design Department. In 2010 the new Design Department was formed and multiple administrative restructuring took place.
over the next three years. In the 2013/14 Academic Year the Industrial Design operated without any release time for a Program Coordinator and thus was not able to conduct normal assessment procedures. We do hope that with the current structure in the Department and the Program (shared leadership) that we are able to step back into our plans for assessment that were made in 2011. The new Assessment Team in Industrial Design met for a “how-to” session for the department on performing assessment as required by the College and has been working with the College Assessment Facilitator to get the ID Major back on track with University Assessment Planning and strategies as the creation of this report demonstrates.

11. **Assessment Data**
   Please see Section C #10.

12. **Analysis**
    Please see Section C #10.

13. **Proposed changes and goals (if any)**
    Please see Section C #10.