Assessment Date:  Fall 2013
Faculty Name(s):  David Topham

1. Course Name and Number:

CS 116 Object-Oriented Programming using C++

2. All Course SLOs from the Course Outline of Record:

1. Compare and contrast object-oriented programming with procedural programming
2. Practice creating modules using encapsulation, information hiding, inheritance, and polymorphism
3. Recognize the concept of types as a set of values together with a set of operations
4. Design and construct Exception handling methods
5. Create Linked Structures using pointers
6. Formulate procedures, functions, and iterators as abstraction mechanisms
7. Construct parameterized types (i.e. class templates in C++)
8. Propose and evaluate the separation of specification and implementation

3. Specific Course SLO(s) assessed as part of this project:

SLO 1 was assessed to determine the depth of the students ability to operate at Bloom's Taxonomy of Cognitive Level for analysis to: Compare and contrast object-oriented programming with procedural programming

4. Assessment strategy or tool used in the assessment. (Describe below, and if applicable copy/paste any additional related documents at end of this form (i.e. Rubric, score sheet, test questions, essay assignment, etc.):

This essay question was added to the final exam:
“In your own words, explain some of the differences between object-oriented programming and procedural programming. List some advantages and disadvantages of each method.”

5. Specific aspects of the assessment tool which link up to specific Course SLOs being assessed (i.e. Which specific test questions measured which Course SLOs? Note: May describe with #4 above.):

Since the SLOs are on the syllabus and because I reminded the students that SLOs would be assessed on the final exam, this was not a “surprise” question. But even so, students sometimes have difficulty expressing themselves well in essay questions (this is especially true for ESL students). I focused as much as possible on the content of their answer rather than the quality of the English.

6. Results and analysis of the data. (Explain below and if applicable copy/paste any related documents, i.e. spreadsheets with data at the end of this document.):

We break down our results into 4 categories: “No Clue”, “Some Proficiency”, “Close, but no cigar”, and “Got it”.

COURSE ASSESSMENT IN A BOX
REPORTING FORM FOR COURSE SLO ASSESSMENT PROJECTS
Please submit this document to your Dean when completed.
Revised August 2013
For this question, of the 25 students that responded, only 1 was clueless! The largest group (10/25) really “got it” and were able to answer with accuracy and used their own examples. By percentage that is:

<table>
<thead>
<tr>
<th>SLO #1</th>
<th>No Clue</th>
<th>Some Proficiency</th>
<th>Close, but No Cigar</th>
<th>Got It!</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS116 – Fall 2013</td>
<td>1 (0.4%)</td>
<td>7 (28%)</td>
<td>7 (28%)</td>
<td>10 (40%)</td>
<td>25 (100%)</td>
</tr>
</tbody>
</table>

We should continue to focus on teaching technical communication using these types of essay questions.

7. Describe any faculty dialogue that occurred as part of the assessment process (i.e. Were results shared at a department meeting? Was there discussion about changing any SLOs? Etc.):

CS116 is an important part of our program to bridge the gap between introduction to programming in a procedural way (CS I) to analysis of data structures (CS II). We feel that this SLO is very important and that the results are good.

8. Next steps (i.e. any planned revisions to curriculum or teaching strategies to promote student success, future assessment plans, etc.):

In general, we need to help students learn how to communicate more clearly. One idea is to have more essay questions of this nature added during the semester. For example, we could have more questions like this in quizzes with feedback given to the student about how to express their thoughts effectively.

9. Results of implemented changes, if available at this time:

N/A

Please save your finished document in the following format:
yyysemester-sloa-courseid.doc
example: 2012fall-sloa-engl101c.doc