General Education Annual Course Assessment Form

Course Number/Title ______ Stat 95: Elementary Statistics ______ GE Area ______ B4 __________________________

Results reported for AY ______ 2013-14 ______ # of sections ______ 11 ______ # of instructors ______ 5 ______

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Department Chair: ______ Ron Rogers ____________________ College: ______ CoSS _________________________

Instructions: Each year, the department will prepare a brief (two page maximum) report that documents the assessment of the course during the year. This report will be electronically submitted, by the department chair, to the Office of Undergraduate Studies, with an electronic copy to the home college by October 1 of the following academic year.

Part 1

To be completed by the course coordinator:

(1) What SLO(s) were assessed for the course during the AY?

GE SLO1: Mathematical concepts courses should prepare the student to use mathematical methods to solve quantitative problems, including those presented in verbal form.

Other, specific to Area B4, SLO4: Focus on basic mathematical techniques for solving quantitative problems and elementary numerical calculation

(2) What were the results of the assessment of this course? What were the lessons learned from the assessment?

Assessment was accomplished using two methods: (1) class-based; and (2) a standardized post-test exit exam given on the day of the Final Exam. The table below presents the results of each assessment method for SLOs 1 and 4. For the class-based assessment, instructors were asked to provide information about assignments given each semester that assessed SLOs 1 and 4, as well as student performance on those assessments. Instructors reported that they assessed these SLOs through exam items that presented students with verbal problems requiring identification of the appropriate statistical procedure to answer the question and calculation of the relevant statistics. Instructors also used in-class quizzes asking students to calculate means and standard deviations from verbal problems. Almost all of the assignments used in Stat 95 (quizzes, exams, problem sets) require students to use basic mathematical techniques to solve quantitative problems, as is the focus of SLO 4.

<table>
<thead>
<tr>
<th>Assessment Method</th>
<th>Number of Students Assessed</th>
<th>Percent who mastered SLOs 1 and 4 at a high level</th>
<th>Percent who mastered SLOs 1 and 4 at an average level</th>
<th>Percent who mastered SLOs 1 and 4 at a low level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class-Based</td>
<td>391</td>
<td>26.1%</td>
<td>38.9%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Post-Test</td>
<td>490</td>
<td>50.2%</td>
<td>43.7%</td>
<td>6.1%</td>
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</table>
The lesson learned from this assessment is that students tend to do well when problems are presented in verbal format (SLO 1). Almost all of the instructors commented on students’ ability to apply course concepts to everyday problems. Students tend to struggle more with the mathematical techniques required to solve quantitative problems. Specifically, many instructors feel that students lack the foundational mathematical skills needed to solve statistical problems and interpret the results.

(3) What modifications to the course, or its assessment activities or schedule, are planned for the upcoming year? (If no modifications are planned, the course coordinator should indicate this.)

Although no changes are planned across all sections, instructors commented that they plan to require students to complete problem sets from the textbooks both in and out of class in order to solidify the required mathematical skills. Some instructors also plan to modify their class presentations in order to help students identify gaps in their basic mathematical knowledge.

**Part 2**

To be completed by the department chair (with input from course coordinator as appropriate):

(4) Are all sections of the course still aligned with the area Goals, Student Learning Objectives (SLOs), Content, Support, and Assessment? If they are not, what actions are planned?

Sections are generally aligned with the GE criteria listed above. Participation rates for assessment data collection can be improved. I recommend the coordinators make follow-up contacts with instructors who do not provide data to emphasize the importance of collecting and providing requested assessment data, and to “cc” to the chair in case for further action is needed. We will continue to make efforts to increase compliance requests for the class-based assessment data.

(5) If this course is in a GE Area with a stated enrollment limit (Areas A1, A2, A3, C2, D1, R, S, V, & Z), please indicate how oral presentations will be evaluated with larger sections (Area A1), or how practice and revisions in writing will be addressed with larger sections, particularly how students are receiving thorough feedback on the writing which accounts for the minimum word count in this GE category (Areas A2, A3, C2, D1, R, S, V, & Z) and, for the writing intensive courses (A2, A3, and Z), documentation that the students are meeting the GE SLOs for writing.

n/a