## Academic Assessment Report - AY 2012-2013

# Name of Program: B.S. Computer Science School or Department: Computer Science College: Natural, Applied, and Health Sciences Kean University

### **Program SLOs:**

(List Program SLOs) Students who graduate with a BS in Computer Science should be able to:

SLO1: Apply knowledge of computing and mathematics appropriate to the discipline. (KU 1, 4) (GE K1, S1, S3, S4, S5)

SLO2: Analyze a problem and identify and define the computing requirements appropriate to its solution. (KU 1, 4) (GE K1, S1, S3, S4, V2)

**SLO**3: Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs. (KU 1, 2, 3) (GE K1, S1, S2, S3, S4, S5)

SLO4: Use current techniques, skills, and tools necessary for computing practice. (KU 1, 2, 4) (GE K1, S1, S2, S5, V5)

#### \* KU Student Outcomes: Kean University graduates should be able to:

- 1. Think critically, creatively and globally;
- 2. Adapt to changing social, economic, and technological environments;
- 3. Serve as active and contributing members of their communities; and
- 4. Advance their knowledge in the traditional disciplines (GE) and enhance their skills in professional areas (Prof. pgms)

### \*\*General Education Student Learning Outcomes

- Student Learning Outcomes Knowledge: Students will demonstrate proficiency in knowledge and content by:
- (K1) applying the scientific method to understand natural concepts and processes;
- (K2) evaluating major theories and concepts in social sciences;
- (K3) relating historical references to literature; and
- (K4) evaluating major theories and concepts in the fine arts.
- Student Learning Outcomes Skills: Students will demonstrate the skills necessary to:
- (S1) write to communicate and clarify learning ;
- (S2) communicate effectively through speech;
- (S3) solve problems using quantitative reasoning;
- (S4) think critically about concepts in multiple disciplines; and
- (S5) show information literacy.
- Student Learning Outcomes Values: Students will exhibit a set of values that demonstrates:
- (V1) personal responsibility
- (V2) ethical and social responsibility
- (V3) social and civic engagement
- (V4) respect for diverse cultures and perspectives
- (V5) life-long learning

| Program Level<br>Student Learning<br>Outcomes<br>(Add rows for additional<br>SLOs)  | Assessment<br>Measure(s)<br>(Add rows if necessary)   | Assessment Criteria<br>(Describe how data is<br>collectedrubric,<br>survey, etc.) | <b>Results of Assessment</b><br>(Specific to Data Collected)   | <b>Action Taken</b><br>(Closing the Loop: New action or follow<br>up from last Assessment Report)  |
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| <b>SLO #1</b><br>Apply knowledge of<br>computing and<br>mathematics<br>appropriate to the<br>discipline.                          | Direct #1: CPS 4951:<br>Project report scored with<br>rubric to show<br>achievement of program<br>goals.        | Requirements<br>document  | On a 5-point scale (5 high),<br>100% of students scored 3<br>or greater.                                   | A majority of students scored 80% or better; no action at this time.   |
|   |   |   |  | Improvement seen from 1 year earlier.<br>In AY 2013-2014 course content will<br>continue to be directly mapped to this<br>SLO.   |
|   | Indirect: Program<br>Completer Survey   | Qualtrics Survey  | 100% of respondents<br>strongly agree or agree that<br>they met this SLO.                                  | Program SLOs will continue to be clearly<br>shared with students in earlier classes,<br>with an understanding of how each<br>course contributes to SLO.  |
| <b>SLO #2</b><br>Analyze a problem and<br>identify and define the<br>computing<br>requirements<br>appropriate to its<br>solution. | Direct #1: CPS 4951:<br>Project report scored with<br>rubric to show<br>achievement of program<br>goals.        | Design document   | On a 5-point scale (5 high),<br>100% scored 3 or greater on<br>focus and point-of-view.                    | In AY 2013-2014, examples will continue<br>to be provided of projects and designs<br>used in previous terms, to provide<br>students with better understanding of the<br>design document process. |
|   | Indirect: Program<br>Completer Survey   | Qualtrics Survey  | 90% of respondents<br>strongly agree or agree that<br>they met this SLO; 10%<br>neither agree or disagree. | In AY 2013-2014 course content will be<br>continue to be directly mapped to this<br>SLO; program SLOs will be clearly shared<br>with students in earlier classes.                                |
| SLO #3<br>Design, implement, and<br>evaluate a computer-<br>based system, process,<br>component, or program                       | Direct #1: CPS 4951:<br>Project demonstration<br>scored with rubric to<br>show achievement of<br>program goals. | Design document and presentation  | On a 5-point scale (5 high),<br>100% scored 3 or greater on<br>analysis of topic and<br>demonstration.     | A strong majority of students scored 80% or better; no action at this time.  |

| to meet desired needs.  | Indirect: Program<br>Completer Survey   | Qualtrics Survey | 100% of respondents<br>strongly agree or agree they<br>met this SLO. | In AY 2013-2014 illustrations will continue<br>to be made to the students as to how<br>they have mastered this SLO.<br>Program SLOs will be clearly shared with<br>students in earlier classes, along with how<br>the work they are doing meets the SLO. |
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| <b>SLO #4</b><br>Use current techniques,<br>skills, and tools | Direct: CPS 4951: Project<br>report and oral<br>presentation scored with<br>rubric to show<br>achievement of program<br>goals | Presentation     | On a 5-point scale (5 high)<br>100% scored 3+ on overall<br>impact.  | A majority of students scored 80% or better; no action at this time.   |
| necessary for computing practice.                             | Indirect: Program<br>Completer Survey   | Qualtrics Survey | 100% of respondents<br>strongly agree or agree they<br>met this SLO. | 100% of respondents replied either<br>strongly agree or agree; no action at this<br>time.  |