

Program Learning Outcome Assessment Plan Template

General Information

Academic Year of Implementation: 2011 – 2012

Academic Program / Discipline Area (for General Education) or Co-Curricular Program Area:

Computer Engineering Technology (Networking), Cybersecurity and Digital Forensics

Planning Team:

| Planning Team Leader(s) ¹ | Campus | E-mail Address | Phone Extension | Mail Code |
|--------------------------------------|--------|----------------------------------------------------------------------------------|-----------------|-----------|
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| Planning Team Members ² | Campus | E-mail Address | Phone Extension | Mail Code |
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Learning Outcomes and Performance Indicators

¹ Planning Team Leaders assume the responsibility for coordinating activities associated with the expectations for the design, approval and implementation of Assessment Plans. See the attached documents entitled *Program Outcome Assessment Plan Approval and Improvement Process* and *Program Outcome Assessment Plan Approval and Improvement Process – Student Affairs*

² Planning Team membership, whenever possible, should reflect the *Principles for selection of members for assessment plan work teams*: Collegewide representation where possible; Full-time faculty from the respective program / discipline (tenured, tenure track, and Non-Tenure Earning 4 / 8 / 10 month faculty); Adjunct faculty when an adequate number of full-time faculty do not teach in the program / discipline; Faculty from both disciplines or programs when an outcome is assessed in two programs or a program other than the primary discipline.

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| Academic Program / Discipline Area (for General Education) or Co-Curricular Program Area: <ul style="list-style-type: none"> Computer Engineering Technology (Networking) | |
| Targeted Program Learning Outcome: <ul style="list-style-type: none"> Defend an Enterprise-Level Network Against Cyber Threats and Exploits | Targeted Course(s), Co-Curricular Program or Student Activity associated with the Academic Program: <ul style="list-style-type: none"> CET 2894C |
| | Targeted Outcome(s) within the Course(s), Co-Curricular Program or Student Activity identified above: Implement Protective measures critical to securing a network Infrastructure |
| Performance Indicators for the Program Learning Outcome(s) selected: <ul style="list-style-type: none"> Create an inventory list of all network devices Identify the security risks and vulnerabilities inherent in each networked device Harden network devices against known attacks Monitor and manage the security of a network using various logging facilities and network management tools | Performance Indicators for Outcome(s) within the Course(s), Co-Curricular Program or Student Activity selected: <ul style="list-style-type: none"> Produce detailed documentation of project, including network topologies, incident reports, vulnerability assessment reports, and penetration testing reports. Using presentation software, develop and present project information to instructor |
| Common Assessment (What assessment method (written assignment, speech, test, etc.) will you use to assess student ability related to the program / course outcome(s) selected): <ul style="list-style-type: none"> Capstone Project (Cyber Defense Exercise) | |
| Description of the Proposed Common Assessment (Common assessments should be designed to ensure a balance between (1) the need for a consistency within the program in order to ensure comparable student artifacts and (2) the need for reasonable flexibility in order to encourage faculty judgment in the design and delivery of learning activities): <ul style="list-style-type: none"> Capstone project selected by instructor (Cyber Defense Exercise) | |
| Proposed Assessment Instrument (In some cases the assessment method may not need an associated assessment instrument – e.g., multiple choice tests): Rubric for the Cyber Defense Exercise | |

Implementation Process

Approval Process

| Activities Associated with the Approval of Assessment Plans | Date | Person Responsible |
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| Draft assessment plan is circulated for input to reviewers appropriate to the program / discipline | 8/24/2011 | Wael Yousif |
| College-wide live or e-mail / Blackboard discussion will be coordinated to consider input received | 9/7/2011 | Wael Yousif |
| Draft assessment plan is revised to reflect input | 9/21/2011 | Wael Yousif |
| Current voter eligibility list for curriculum will be used to vote on draft assessment plan | 10/5/2011 | Wael Yousif |

Faculty / Professional Development Needs Associated with the Proposed Common Assessment

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| <p>What training / preparation / information will faculty or staff need in order complete the proposed assessment plan?</p> <ul style="list-style-type: none"> • Rubrics workshop for ALLCET faculty (associated with the proposed assessment) • We could also benefit from these training sessions for all CET faculty: <ul style="list-style-type: none"> ○ Outcomes-based practice ○ Authentic assessment |
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Collection of Student Artifacts

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| <p>What information needs to be communicated to students concerning the assessment process (informed consent, etc.)?</p> <ul style="list-style-type: none"> • Computer and Network Acceptable Usage Policy |
| <p>How will student artifacts or data associated with student performance be collected?</p> <ul style="list-style-type: none"> • Capstone class projects (Cyber Defense Exercise) in Fall and Spring Semesters |
| <p>If student artifacts are to be collected based on a random sample of students registered for the course or participating in the program / activity,</p> |

what characteristics should the sample include?

- N/A. Not random

How will information about faculty / staff participation in the assessment project be communicated?

- Email and face-to-face meetings between faculty teaching the Cybersecurity-Capstone and faculty serving as part of the evaluation team.

Who will be responsible for coordinating the collection of student artifacts?

- Capstone instructors

At what point in the academic year / semester will the student artifacts be collected?

- End of each term – Fall and Spring

Program Level Assessment / Evaluation of Student Artifacts and Analysis of Results

When will student artifacts be assessed / evaluated (*Learning Day 2012 is scheduled for February 11, 2012; Assessment Day 2012 is scheduled for May 5, 2012*)?

- Assessment Day 2012

Which faculty or staff from the program/discipline will evaluate student artifacts?

- At least Program Chairs and Capstone instructors.

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| <p>What training / preparation / information will faculty or staff need in order adequately assess / evaluate the student artifacts collected?</p> <ul style="list-style-type: none">• None |
| <p>When will the results / data associated with the assessment plan be analyzed?</p> <ul style="list-style-type: none">• Assessment Day, 2012 |
| <p>What training / preparation / information will faculty or staff need in order to analyze the results data associated with this assessment plan?</p> <ul style="list-style-type: none">• None |
| <p>What additional sources of data might allow faculty / staff to better understand and act on the results of this assessment plan?</p> <ul style="list-style-type: none">• Southeast Collegiate Cyber Defense Competition. |
| <p>In order to ensure curricular and programmatic alignment, who else should be included in this conversation (e.g., faculty from related discipline areas in General Education)?</p> <ul style="list-style-type: none">• Computer Engineering Technology Advisory Committee• NIST, National Initiative for Cybersecurity Education (NICE) |
| <p>How will the assessment results be disseminated to stakeholders (Faculty, Staff, Advisory Boards, etc.)?</p> <ul style="list-style-type: none">• Assessment Day minutes, advisory committee meetings, and division meetings, and NICE Webinars |

Improvement Plan and the Use of Assessment Results

What do the results of this assessment plan suggest about changes / improvements needed within the curriculum (targeted course(s), co-curricular program or student activity)?

What changes to the common course outlines, if any, need to be considered?

What do the results of this assessment plan suggest about changes / improvements to the program assessment process?