

Program Learning Outcome Assessment Plan

General Information

Academic Year of Implementation: **2011 – 2012**

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

(Items Highlighted in red require primary attention in the planning process – not all highlighted areas need to be completed):

B.S. Electrical and Computer Engineering Technology – Lasers & Photonics Concentration
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Planning Team:

Planning Team Leader(s) ¹	Campus	E-mail Address	Phone Extension	Mail Code
Ali Notash	West	anotash@valenciacollege.edu	1937	4-41
Masood Ejaz	West	mejaz@valenciacollege.edu	1945	4-41
Planning Team Members ²	Campus	E-mail Address	Phone Extension	Mail Code

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**. For faculty teams the principles include: 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. For plans developed in Student Affairs planning teams should include the following: Collegewide representation where possible; Staff from the targeted program area; Part-time Student Affairs professionals when an adequate number of full-time staff do not work in the targeted program area; Faculty / staff from other program / discipline areas working on the same or similar outcomes; Students representation when possible.

Academic Program / Discipline Area (for General Education) or Co-Curricular Program Area: B.S. Electrical and Computer Engineering Technology – Lasers & Photonics Concentration	
Targeted Program Learning Outcome: Existing: Apply application of circuit analysis and design, computer programming, to the building and testing of laser and optical systems Proposed revision: Utilize circuit analysis and design techniques, and computer programming to the building and testing of laser and optical systems	Targeted Course(s), Co-Curricular Program or Student Activity associated with the Academic Program: EET 4950 – Senior Design Project (Capstone)
	Targeted Outcome(s) within the Course(s), Co-Curricular Program or Student Activity identified above: <ul style="list-style-type: none"> • Develop, test, and evaluate an engineering project • Engage effectively in interpersonal, oral, visual, and written communication • Demonstrate clear and well thought out Design Process • Identify alternative designs and perform diverse perspective analysis e.g., economic; manufacturability; environmental; health and safety
Performance Indicators for the Program Learning Outcome(s) selected: <ul style="list-style-type: none"> • Successful demonstration of understanding of optical circuit analysis and design techniques used in the employment of final design • Excellent knowledge of circuit simulation and procedural programming software • Successful demonstration of electronics and optical circuit troubleshooting skills and use of laboratory testing equipment 	Performance Indicators for Outcome(s) within the Course(s), Co-Curricular Program or Student Activity selected: <ul style="list-style-type: none"> • Develop a prototype model or computer simulation of the project • Demonstrate relevant mathematical expertise necessary for the design • Conduct the necessary test, evaluation, and modification • Provide a professional technical report and demonstrate presentation skills
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): Capstone Project	
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): Capstone Project assigned by industry and approved by faculty	
Proposed Assessment Instrument (In some cases the assessment method may not need an associated assessment instrument – e.g., multiple choice tests): Project report, demonstration assessed by peer review rubric, and industry evaluation and survey	

Implementation Process

Collection of Student Artifacts

<p>What information needs to be communicated to students concerning the assessment process (informed consent, etc.)? None</p>
<p>How will student artifacts or data associated with student performance be collected? Capstone class projects in Fall/Spring semesters</p>
<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, what characteristics should the sample include? All samples will be collected</p>
<p>How will information about faculty / staff participation in the assessment project be communicated? Email/Phone/face-to-face meetings</p>
<p>Who will be responsible for coordinating the collection of student artifacts? Capstone Instructor</p>
<p>At what point in the academic year / semester will the student artifacts be collected? End of each term (Fall/Spring)</p>

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

<p>When will student artifacts be assessed / evaluated? Assessment day - 2015</p>
<p>Which faculty or staff from the program/discipline will evaluate student artifacts? Program Chair and Capstone instructor</p>
<p>What training / preparation / information will faculty or staff need in order adequately assess / evaluate the student artifacts collected? None</p>

When will the results / data associated with the assessment plan be analyzed? Assessment Day - 2015
What training / preparation / information will faculty or staff need in order to analyze the results data associated with this assessment plan? None
What additional sources of data might allow faculty / staff to better understand and act on the results of this assessment plan? Results and data from Program Viability Meeting
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)? Division Dean, Electronics Engineering Technology Faculty, and Electronics Engineering Advisory Board
How will the assessment results be disseminated to stakeholders (Faculty, Staff, Advisory Boards, etc.)? Assessment Day minutes, advisory committee meetings, and division meetings

Approval Process

Activities Associated with the Approval of Assessment Plans	Completion Date	Person Responsible	Results
Draft assessment plan is circulated for input to reviewers appropriate to the program / discipline (including Deans / Directors responsible for		Ali Notash	

supporting and promoting the work necessary for the implementation of the Assessment Plan)			
College-wide live or e-mail / Blackboard discussion will be coordinated to consider input received (if needed)		Ali Notash	
Draft assessment plan is revised to reflect input		Ali Notash	
Faculty vote on the Assessment Plan using the Current voter eligibility list for curriculum (http://valenciacollege.edu/faculty/forms/voterlists/)		Ali Notash	

Dean / Director Support

The Dean(s) / Directors (for Librarians) responsible for supporting and promoting the work necessary for the implementation of the Assessment Plan need to indicate their support for the plan.

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Dean / Director East / Winter Park Campus	Signature
Dean / Director Osceola / Lake Nona Campus	Signature
Dean / Director West Campus	Signature

Improvement Plan and the Use of Assessment Results (To be completed after the implementation of the initial Assessment Plan and the review of student artifacts)

<p>What do the results of this assessment plan suggest about changes / improvements needed within the curriculum (Specific recommendations for improvement, targeted course(s), co-curricular program or student activity)?</p>
<p>What changes to the common course outlines, if any, need to be considered?</p>
<p>What do the results of this assessment plan suggest about changes / improvements to the program assessment process?</p>
<p>Individual(s) Responsible leading the implementation of recommendations</p>

Stakeholders Impacted by the recommendations for improvement
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