

# UC IRVINE Graduate Council (May 2011)

## Development of Program Learning Outcomes (PLOs) for all Graduate Programs

To address this new area of focus, the Graduate Council has developed a guideline to assist in development of specific learning outcomes for each graduate program, along with evaluative measures.

**Part 1: Program Learning Objectives:** Consider the *examples* of the six proposed PLOs listed below. These PLOs and/or others that might apply can be customized to represent the unique perspective of each graduate program.

### Part 2: Assessment Plan

- A. Identify graduate program –specific direct and indirect lines of evidence for each of the PLOs.
- B. Articulate evaluation parameters for measuring introductory and advanced levels of graduate student development for each PLO.

**Part 3: Curricular Plan:** List all courses, both required and elective, as well as other required graduate education activities. Place the designation of I (introductory content) or A (advanced content) within each column as appropriate to the contribution of the activity toward meeting the specific PLO.

**Part 4 – Action Plan Based on Assessment Data:** Based on the assessment data collected, provide detailed information about actions steps to be taken to improve identified deficiencies.

## GUIDELINE FOR GRADUATE PROGRAM LEARNING OUTCOMES AND EVALUATION

### PART 1 - PROGRAM LEARNING OUTCOMES:

The following graduate program learning outcome (PLOs) *examples* are designed with the goal of placing graduated master's or doctoral students into post-degree and tenure-track (as appropriate) positions in competitive research universities, careers in secondary education, non-profits, business and consulting, government and private agencies conducting research and other fields that draw on research and teaching skills of these graduates in the focused area of their graduate preparation. For example, the areas could include:

- **PLO 1 - Core Knowledge:** graduate students will demonstrate advanced knowledge in a specialized area *consistent with the focus of their graduate program*.
- **PLO 2 – Research Methods and Analysis:** graduate students will demonstrate quantitative and qualitative skills in the use of data gathering methods and data analysis techniques used for typical analyses in conducting research that is *consistent with the focus of their graduate program*.
- **PLO 3 - Pedagogy:** graduate students will participate in classroom pedagogy consistent with undergraduate education in the associated major.
- **PLO 4 - Scholarly Communication:** graduate students will produce written and oral communications of quality, as *consistent with the focus of their graduate program*.
- **PLO 5 - Professionalism:** graduate students will know and participate in the intellectual and organizational aspects of the profession *as applicable to the major area of study* including the ethical conduct of research.
- **PLO 6 - Independent Research:** graduate students will conduct independent research resulting in an original contribution to knowledge in the *focused areas of their graduate program*.

### Part 2 - ASSESSMENT PLAN:

- A. Types of Direct and Indirect Lines of Evidence for Measuring Each PLO

The table below summarizes the kinds of direct and indirect evaluative data programs might draw on to assess progress towards and achievement of the PLOs for each graduate program:

<b>EXAMPLES of Lines of Evidence for Assessing “Specific Graduate Program” Learning Outcomes</b>		
	<i>Lines of Evidence</i>	
<i>Program Learning Outcomes</i>	<i>Direct</i>	<i>Indirect</i>
Core Knowledge	<ul style="list-style-type: none"> <li>a. Content courses</li> <li>b. Pre-Candidacy project or examination</li> <li>c. Annual advisement review</li> <li>d. Doctoral dissertation</li> </ul>	<ul style="list-style-type: none"> <li>a. Mid-course assessments</li> <li>b. Program exit interview</li> <li>c. Alumni survey</li> </ul>
Research Methods and Analyses	<ul style="list-style-type: none"> <li>a. Methods and data analysis courses, including statistics where appropriate</li> <li>b. Early assessment of skills applicable to independent research potential</li> <li>c. Pre-Candidacy project or examination</li> <li>d. Annual advisement review</li> <li>e. Doctoral dissertation proposal</li> <li>f. Doctoral dissertation</li> </ul>	<ul style="list-style-type: none"> <li>a. Mid-course assessments</li> <li>b. Program exit interview</li> <li>c. Alumni survey</li> </ul>
Pedagogy	<ul style="list-style-type: none"> <li>a. Teaching Assistantship</li> <li>b. Instructional workshops</li> <li>c. TA evaluations</li> <li>d. Annual advisement review</li> </ul>	<ul style="list-style-type: none"> <li>a. Mid-course assessments</li> <li>b. Program exit interview</li> <li>c. Alumni survey</li> </ul>
Scholarly Communication	<ul style="list-style-type: none"> <li>a. Content courses</li> <li>b. Early writing assessment (possibly at the end of the first year)</li> <li>c. Pre-Candidacy project or examination</li> <li>d. Annual advisement review</li> <li>e. Presentation at scholarly meetings or in colloquia series</li> <li>f. Annual writing goal</li> <li>g. Papers/articles/books/grants</li> <li>h. Doctoral dissertation proposal</li> <li>i. Doctoral dissertation</li> </ul>	<ul style="list-style-type: none"> <li>a. Mid-course assessments</li> <li>b. Program exit interview</li> <li>c. Alumni survey</li> </ul>
Professionalism	<ul style="list-style-type: none"> <li>a. Service activities</li> <li>b. Professional development activities</li> <li>c. Seminar series</li> <li>a. Responsible conduct of research / ethics</li> <li>d. Evaluation of mentorship and IDP</li> </ul>	<ul style="list-style-type: none"> <li>a. Mid-course assessments</li> <li>b. Program exit interview</li> <li>c. Alumni survey</li> </ul>
Independent Research	<ul style="list-style-type: none"> <li>b. Pre-Candidacy project or examination</li> </ul>	<ul style="list-style-type: none"> <li>a. Mid-course assessments</li> <li>b. Program exit interview</li> </ul>

	c. Responsible conduct of research / ethics d. Doctoral dissertation	c. Alumni survey
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**B. Evaluation Parameters for Measuring Introductory and Advanced Levels of Graduate Student Development for Each PLO**

Each of the PLOs should be continually evaluated based on the direct lines of evidence identified above, collectively supporting the evaluation of introductory and advanced levels of development over the course of each student's program trajectory. Emphasis should be placed on early assessment of indicators that predict success in the graduate experience.

**PLO 1 - Core Knowledge:**

- a. Introductory understanding of the core knowledge is assessed by...
- b. Advanced understanding of the core knowledge is assessed by...

**PLO 2 - Research Methods and Analysis:**

- a. Introductory understanding of data analysis and research methods is assessed by...
- b. Advanced understanding of data analysis and methods is assessed by...

**PLO 3 - Pedagogy:**

- a. Introductory understanding of pedagogy is assessed by...
- b. [Other levels may or not apply for a specific graduate program]

**PLO 4 - Scholarly Communication:**

- a. Introductory skill related to scholarly communication is assessed by...
- b. Advanced skill related to scholarly communication is assessed by...

**PLO 5 - Professionalism:**

- a. Introductory skill related to professionalism is assessed by...
- b. Advanced skill related to professionalism is assessed by...

**PLO 6 - Independent Research:**

- a. Introductory knowledge and skill for independent research is assessed by...
- b. Advanced knowledge and skill for independent research is assessed by...

**PART 3 - CURRICULAR MAP**

The following curricular map connects each PLO to related coursework (required as well as available) and additional requirements for the program. In this map, I = Introductory content, and A = Advanced content.

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6
<b>Coursework</b>						
Core course 1	I					
Core course 2	I					
Core course 3	A					
Core course 4	A				I	
Core course 5	A					
Core course 6	A					A
Elective course 1	A				I	
Elective course 2	A					
Elective course 3	A					
Elective course 4	A					

<b>Other Graduate Requirements</b>						
Pre-Candidacy Project	I	I		I		
Doctoral Dissertation	A	A		A		A
Teaching Assistantships			I			
Service Activities						A
Professional development activities					I	
RCR / Ethics focus	I				A	

**PART 4 – ACTION PLAN BASED ON ASSESSMENT DATA**

Based on the assessment data collected above, provide detailed information about actions steps to be taken to improve identified deficiencies.