## **Student Learning Outcomes Assessment in the State University System**

University: UCF	Degree Program: Chemistry			
Assessment Instruments and Procedures	Discipline Knowledge and Skills	Commu- nication Skills	Critical Thinking Skills	Comments
Nationally Normed Exam: Educational Testing Service Field Exam in Chemistry	X			Outcome 1: Will have knowledge of chemistry, which compares favorably to that of students nationally.  Notes:  Exam given in senior year.  Performance on the exam and the sub scores that cover four fundamental areas of chemistry and two Assessment Indicators:  (1) Biochemistry and (2) Critical Thinking and Reasoning will be used to evaluate student learning on an individual and total group basis.
Departmental survey to measure acceptance into advanced degree programs	X			Outcome 1:  Note: Administered during last semester of senior year
Direct observation by faculty of progress on preparation of presentation	X	X	X	Outcome 2: Will critically read the chemical literature, grasp and outline the pertinent information, and be able to present it orally to an audience of peers and faculty members.

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Faculty panel to evaluate presentation using a rubric  (All students will perform a thorough review of a scientific topic and prepare a seminar following established guidelines that address use of the current scientific literature and appropriate presentation aids as determined by the departmental seminar committee. The faculty member in charge of the seminar course will determine when/if sufficient progress has been made before the student will be allowed to present the seminar.)				Outcome 2:  Note: Eighty percent of the preparations/presentations will receive an overall evaluation of a "4" or "5" on a 5-point scale as determined by a faculty panel.
URC will evaluate the research and paper using a 20-point scoring scale  (A predetermined evaluation scheme (1 to 5pts. each) for categories that includes Style, Literature Review, Content, and Critical Evaluation)	X	X		Outcome 3: Will be able to use the scientific method to solve original chemical problems, review appropriate literature, collect data, and analyze results and successfully complete an undergraduate research project to be considered for submission to an appropriate journal.