

STUDENT LEARNING OUTCOMES
HANDBOOK
FOR
COURSE LEVEL

DEFINITION OF COURSE LEVEL SLO: An assessable statement of what students will be able to think, know, do, or feel as the result of completing a course

CHARACTERISTICS OF ROBUST STUDENT LEARNING OUTCOMES

1. Describes a behavior or skill that is beyond recognition or recitation of content knowledge.
2. Uses action verbs indicative of Bloom's taxonomy, moving toward the higher end of critical thinking.
3. Specifies the materials, situation, or context in which students will be expected to display the newly learned skill, knowledge, or behavior.
4. Describes a life skill that students will use beyond the end of the course.
5. Would be considered a high priority learning outcome by most experts in the discipline.
6. Has an explicit or implied standard of performance.
7. Is amenable to assessment using a scoring rubric.
8. Is an overarching outcome (at the course, program, or college level, rather than at the lesson or unit level).
9. Represents thinking or behaving like a discipline expert.

Source: LEARNINGASSESSMENT@LISTSERV.CCCNEXT.NET
Dr. Jerry Rudmann, Coastline Community College

DIFFERENCES BETWEEN A COURSE OBJECTIVE AND A SLO

SLO statements and course objectives might look very similar but are, in fact, very different in terms of their use and function. This table contains the different characteristics of course objectives and SLOs.

<i>Course Objectives</i>	<i>SLO Statements</i>
...act as guideline for how a course should be structured	... express the end goal—what should the student come away with at the end of a course/program/educational experience?
...are comprehensive. There is a course objective for each part of a course.	... are holistic. They may link together several course objectives.
... are not necessarily linked to an assessment, but faculty are responsible for seeing that each course objective is met.	...are linked to an assessment cycle. Faculty are not only responsible for making sure their students meet the stated outcome, but also for demonstrating that their students have met their outcome by performing an assessment. Based on this assessment, faculty are also responsible for making improvements based on the results of their assessment.
... are only found at the course level.	... are found at three levels—course, program, and institutional.
... are a <i>permanent</i> part of the course outline of record.	... are linked to the course outline of record, but may change based on assessment results.
... are reviewed and approved by the College Curriculum Committee.	... are reviewed and approved by the College Curriculum Committee and are the responsibility of the faculty who teach a particular course or in a particular program.

SUGGESTED ASSESSMENT PRINCIPLES AND TECHNIQUES

Key Principles of Assessment:

- A. **Clarity** – Students should know what they are expected to know and how they are expected to know it.
- B. **Frequency** – Assessment should involve multiple measures of student performance.
- C. **Variety** – Assessment should involve diverse measures of student performance (e.g., writing, oral presentations, visual presentations, paper and pencil tests, take home tests, independent work, group work, portfolios, self-assessment).
- D. **Novelty** – Students should demonstrate knowledge in forms or context that is not identical to those presented to them by the instructor or textbook (e.g., understand concepts expressed with different words, apply concepts to different examples or situations than those discussed)
- E. **Mastery** – Students should have the opportunity to learn from initial assessment and to be reassessed to demonstrate improved performance.

Assessment Criteria should identify performance characteristics, traits, and/or standards upon which assessment is based.

Examples of Assessment Tools:

- Student work samples
- Embedded assessment (where test questions or skill performance assessment of the learning outcome is embedded in regular course exams)
- Observation of student behavior (based on class discussions, presentations, group work, etc.)
- Juried review of student projects
- Evaluations of performance
- Performance on a case study/problem
- Performance on a problem analysis (student explains how he/she solved the problem)
- National licensure exams
- Locally developed tests and quizzes
- Diagnostic tests
- Standardized tests
- Pre-and post-tests
- Blindly scored essay tests
- Videotapes of performance (especially useful in areas such as drama or music performance)
- Essay examinations
- Standardized and certification exams (in some disciplines, national standardized or certification exams exist that might be useful)
- Students' self-assessment during the course and/or End-of-semester interviews or surveys

- Internship evaluations
- Secondary analyses of course papers (a second reading done by other than the instructor or by others along with the instructor)
- Secondary analyses of course projects (products other than papers, e.g., oral presentations to which other faculty and even area professionals can be invited to serve as outside evaluators)
- Capstone courses (the capstone course is the place where students are most likely to exhibit their cumulative understanding and competence in the discipline)
- Student portfolios (provides a much richer and well-rounded view of student learning than single documents can provide and they can be valuable for programmatic assessment, but the amount of data can be overwhelming and specific ways to view them need to be developed)

Writing Student Learning Outcomes: Preliminary Worksheet

Course _____

Prerequisites for this course _____

In the boxes below, list attitudes, skills, or knowledge that you would like your students to know or do when they leave your class.

Attitudes or values developed as a result of this course	
Skills or performance ability as a result of this course	
Knowledge and concepts they will have as a result of this course	

Now compare your desired outcomes to the Course Objectives. How well do they relate to one another and which will you revise?

Santa Monica College
Student Learning Outcomes

Date:

Course Name and Number:

Student Learning Outcome(s):

1.

As assessed by:

2.

As assessed by:

Demonstrate how this course supports/maps to at least one program and one institutional learning outcome. Please include all that apply:

1. Program Outcome(s):

2. Institutional Outcome(s):

SAMPLE 1

Examples of Course Objectives Transformed into Student Learning Outcomes

Course Objective	Statement of Desired SLO	Assessment
Write well-organized, accurate and significant content. (English)	Context: Given an in-class writing task based on an assigned reading, Outcome: demonstrate appropriate and competent writing which states a thesis, supports assertions, maintains unity of thought and purpose, is organized, and is technically correct in paragraph composition, sentence structure, grammar, spelling, and word use.	
Analyze behavior following the major accepted theories. (Psychology)	Context: Given a particular behavior and its context (e.g., playing incessantly with one's hair when under pressure in the presence of the opposite sex), Outcome: describe how the perspectives of behaviorism, humanistic, psychoanalytic, and biological psychology would interpret that behavior and what methods might each use to alter that behavior. Include theoretical basis, description of causality, and treatment regimen.	
Understand and apply the scientific method. (Biology)	Context: Given a hypothesis, Outcome: design experiments and interpret data according to the scientific method in order to evaluate the hypothesis. Include the ability to approach the scientific method in a variety of ways, formulate questions, design experiments that answer the questions; and manipulate and evaluate the experimental data to reach conclusions.	
Compare and contrast the text and film versions of a literary work. (Film)	Context: After viewing an assigned film based on a literary text, Outcome: write a review of the film. Include an appraisal of the director's selection and effective translation of content from the literary text and the dominant tone the director seems to be trying to achieve, supporting each statement with detail from the text and film and your personal reaction to the cited scenes.	

TERMINOLOGY KEY:

The CONTEXT or conditions under which the student will be expected to apply the knowledge, skill or values, and

The stated OUTCOME in terms of acquired knowledge, skill or values, and

The ASSESSMENT tools which will be used in assessing student performance.

SAMPLE 2: English 2 Student Learning Outcomes

Pluta and Granger-Dickson

Student outcomes: At the end of this course you should be able to	Assessment
<ul style="list-style-type: none"> ❑ read a variety of materials critically to <ul style="list-style-type: none"> ○ identify a thesis ○ summarize important points ○ Analyze main ideas 	<p>Responsive writing assignments throughout the course</p>
<ul style="list-style-type: none"> ❑ solve problems in a variety of settings by <ul style="list-style-type: none"> ○ working productively with others ○ contributing constructively to class discussion ○ thinking for yourself in oral presentations or debates ○ displaying openness to other viewpoints 	<p>During class activities, particularly discussions and group projects</p>
<ul style="list-style-type: none"> ❑ write papers that <ul style="list-style-type: none"> ○ develop a thesis ○ present coherent and logical claims ○ are organized with clear links between claims and support ○ are well developed with sufficient and relevant evidence ○ use standard American English correctly ○ make stylistic choices in persona, syntax, and diction ○ gauge the needs of and address a specific audience 	<p>Papers</p>
<ul style="list-style-type: none"> ❑ prepare an extended research paper that <ul style="list-style-type: none"> ○ develops a thesis ○ presents coherent and logical claims ○ is well organized with clear links between claims and support ○ is well developed with sufficient and relevant evidence ○ uses standard American English correctly ○ makes stylistic choices in persona, syntax, and diction ○ gauges the needs of and addresses a specific audience ○ shows evidence of ability to evaluate sources for reliability, credibility, and authority ○ credits sources appropriately and correctly 	<p>Research Paper</p>
<ul style="list-style-type: none"> ❑ present ideas and research in organized and engaging oral presentations that <ul style="list-style-type: none"> ○ express a thesis clearly ○ are well organized and developed ○ conform to time constraints ○ make stylistic choices in persona, syntax, and diction ○ gauge the needs of and addresses a specific audience ○ show evidence of ability to evaluate and incorporate sources for reliability, credibility, and authority 	<p>Debate, group presentations, and culminating oral presentation of research.</p>
<ul style="list-style-type: none"> ❑ display mental habits that show evidence of <ul style="list-style-type: none"> ○ questioning ○ analysis ○ synthesis ○ beliefs based on evidence ○ and ethical behavior in the academic community 	<p>Discussion, spontaneous in-class writing, papers, and presentations.</p>

<ul style="list-style-type: none">□ assess your growth as a thinker and writer this semester using the criteria above:<ul style="list-style-type: none">○ read a variety of materials critically○ solve problems in a variety of settings○ write papers○ prepare an extended research paper○ present ideas and research in an organized and engaging oral presentation○ display specific mental habits	<h2>Final Paper</h2>
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Bloom Taxonomy: Cognitive, Psychomotor & Affective Domains

Bloom Taxonomy: The Cognitive Domain

Learning Outcomes Related To Knowledge

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Student remembers or recognizes information or specifics as communicated with little personal assimilation.	Student grasps the meaning behind the information and interprets, translates, or comprehends the information.	Student uses information to relate and apply it to a new situation with minimal instructor input.	Student discriminates, organizes, and scrutinizes assumptions in an attempt to identify evidence for a conclusion.	Student creatively applies knowledge and analysis to integrate concepts or construct an overall theory.	Student judges or evaluates information based upon standards and criteria, values and opinions.
Cite Label List Enumerate Identify Imitate Match Name Quote Recall Reproduce State Write	Convert Define Describe Discuss Estimate Explain Generalize Identify Illustrate Locate Paraphrase Restate Summarize	Apply Chart Compute Demonstrate Determine Dramatize Establish Make Manipulate Prepare Project Solve Use	Analyze Compare Contrast Correlate Diagram Dissect Differentiate Distinguish Infer Investigate Limit Outline Separate	Assemble Create Construct Design Develop Formulate Generate Hypothesize Initiate Invent Modify Reframe Synthesize	Access Appraise Conclude Critique Decide Defend Diagnose Evaluate Judge Justify Rank Recommend Support

Bloom Taxonomy: The Affective Domain

Learning Outcomes Related To Attitudes, Behaviors, and Values

Receiving	Responding	Valuing	Organization	Characterization
Students become aware of an attitude, behavior, or value.	Students exhibit a reaction or change as a result of exposure to an attitude, behavior, or value.	Students recognize value and display this through involvement or commitment.	Students determine a new value or behavior as important or a priority.	Students integrate consistent behavior as a naturalized value in spite of discomfort or cost.
Accept	Behave	Accept	Adapt	Authenticate
Attend	Comply	Adapt	Adjust	Characterize
Describe	Cooperate	Balance	Alter	Defend
Explain	Discuss	Choose	Change	Display
Locate	Examine	Differentiate	Customize	Embody
Observe	Follow	Defend	Develop	Habituate
Realize	Model	Influence	Improve	Internalize
Receive	Present	Prefer	Manipulate	Produce
Recognize	Respond	Recognize	Modify	Represent
	Show	Seek	Practice	Validate
	Studies	Value	Revise	Verify

Bloom Taxonomy: The Psychomotor Domain

Learning Outcomes Related To Skills

Observe	Model	Recognize Standards	Correct	Apply	Coach
Students translate sensory input into physical tasks or activities.	Students are able to replicate a fundamental skill or task.	Students recognize standards or criteria important to perform a skill or task correctly.	Students use standards to evaluate their own performances and make corrections.	Students apply this skill to real life situations.	Students are able to instruct or train others to perform this skill in other situations.
Hear	Attempt	Check	Adapt	Build	Demonstrate
Identify	Copy	Detect	Adjust	Compose	Exhibit
Observe	Follow	Discriminate	Alter	Construct	Illustrate
See	Imitate	Differentiate	Change	Create	Instruct
Smell	Mimic	Distinguish	Correct	Design	Teach
Taste	Model	Notice	Customize	Originate	Train
Touch	Reenact	Perceive	Develop	Produce	
Watch	Repeat	Recognize	Improve		
	Reproduce	Select	Manipulate		
	Show		Modify		
	Try		Practice		
			Revise		
*Usually no outcomes or objectives written at this level.					

RESOURCES

Both the Program Review Committee and Curriculum Committee websites have information regarding student learning outcomes and links to other helpful sites. The Institutional Research office has links to outcomes developed here at SMC. These websites will be updated as the college continues working on student learning outcomes.

http://academicsenate.smc.edu/curriculum/student_learning_outcomes.htm

<http://academicsenate.smc.edu/programreview/sloac.htm>

<http://www.smc.edu/research/Student%20Learning%20Outcomes%20Resources.htm>

The best resource statewide is the Center for Student Success.

<http://css.rpgroup.org>