

# Course Learning Outcomes: Creation & Alignment

Presented by the Assessment Office

May 2010



## Workshop Outcome

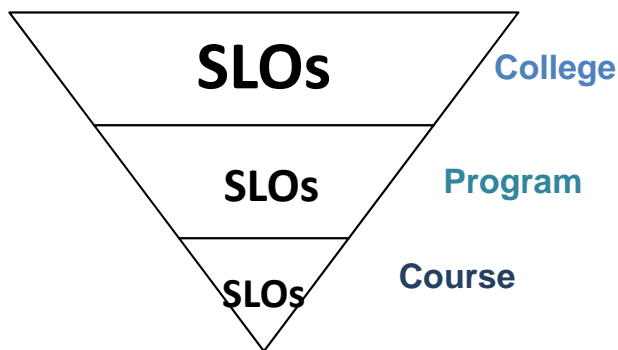
At the end of the workshop, participants can identify good course student learning outcomes and whether they are aligned to a program's student learning outcomes.

Student Learning Outcome=**SLO**

### FAQs

1. Is a course SLO a more specific version of a program SLO?
2. Can a course SLO be exactly the same as a program SLO?
3. Must my course only address program SLOs?
4. Must my course address all program SLOs?

### Levels of SLOs



### TIM Curriculum Map (excerpt)

REQUIREMENTS	#1: Communication	2: Leadership/ Teamwork	#3: Critical/ Creative Thinking	#4: Knowledge & Global Perspective	#5: Ethics & Stewardship
101			I	I	I
301					MA
303	R	I	I	R	R
304	R	I	I	R	R
306	M	M	R	R	R
313	M		IR	IR	
332				RM	

## Strategies to Create Course SLOs

- Fill in the blanks
  - At the end of the course, students should be able to \_\_\_\_\_, know \_\_\_\_\_, and value \_\_\_\_\_.
  
- Answer
  - Why should students take this course?
  - or
  - If this course were taken out of the program, what would students not learn?

## Alignment Check: Course & Program SLOs

TIM 313 SLOs	TIM PROGRAM SLOs				
	#1: Communication	2: Leadership/Teamwork	#3: Critical/ Creative Thinking	#4: Knowledge & Global Perspective	#5: Ethics & Stewardship
#1				X	
#2				X	
#3				X	
#4				X	
#5			X	X	
#6			X		
#7	X				

## Quality & Alignment

Program SLO #1: Students can employ communication skills effectively to accomplish organizational and professional objectives.



Course SLO #7: Students will be able to effectively communicate results of their analyses and evaluations on numerous foodservice related issues verbally and in writing.

## Your Turn . . .

In groups of 3 or 4:

1. Read the assigned example
  - ❖ Are these good or poor course SLOs? Why?
  - ❖ Do any of the course SLOs align with a program SLO?
  - ❖ Write an SLO for a course you teach. Does it align with any of the program SLOs?

## Your Turn . . .

- Please complete the post-workshop questionnaire, quiz, and workshop evaluation

## True or False?

1. A course SLO is often a more specific version of a program SLO. **TRUE**
2. A course SLO can be exactly the same as a program SLO. **TRUE**
3. My course can only address the assigned program SLOs. **FALSE**
4. My course must address all program SLOs. **FALSE**

## Wrap-Up

- How we assess this workshop
  - Group activity
  - Pre-/post-questionnaire
  - Quiz
  - Workshop evaluation

***Collecting Evidence of Student Learning***  
**Wednesday, May 12, 2010**  
**11:00-12:15**

## Thank You!

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## COURSE STUDENT LEARNING OUTCOMES *Best Practices*

### **Basic Elements of Course Student Learning Outcomes (SLO)**

<i>emphasis on student</i>	<i>observable, "action" verb</i>	<i>learning statement</i>
1. Students	can recognize	a variety of types of foodservice operations and concepts
2. Students	can apply	leadership theories to case studies
3. Students	can compare and contrast	data collection methods

### **Practical Considerations**

#### **Meaningful & Important**

- \* Focus on the central aspects of the course and those that are most meaningful and important.

#### **Student + "Action" Verb**

- \* Place the emphasis on students—what they will know, be able to do, or value upon successful completion of the course.
- \* Use verbs that describe what knowledge, skills, and attitudes students should be able to demonstrate because of the course. (See the list of verbs based on Bloom's Taxonomy.)

#### **Cohesive Curriculum**

- \* For required courses and most electives, align at least one course SLO with a program SLO.

#### **Be Realistic**

- \* Keep the learning outcomes to a manageable number (4-6).
- \* Choose verbs appropriate for the level of learning.
- \* Use language that students and others can understand.

### **FAQs<sup>1</sup>**

#### **What are course SLOs?**

- o Course SLOs are clear statements that describe what students can expect to know, do, and value upon successful completion a course.

#### **What are program SLOs?**

- o Program SLOs are overarching learning outcomes that describe learning obtained across multiple courses. They are broad descriptions of what students will be able to know, do, and value upon successful completion of a program.

#### **How are course SLOs related to program SLOs?**

- o Course SLOs contribute to the attainment of program SLOs. Each required course in a cohesive curriculum should contribute to one or more of the program SLOs. The course SLO(s) are often more specific versions of program SLO(s). It is possible for a program SLO to be the same as a course SLO. Note: Courses may have additional SLOs that do not articulate to program SLOs.

#### **Can a course SLO be exactly the same as a program SLO?**

- o Yes. This is typically seen in high-level courses with a skills-based SLO.

#### **Does a course have to address all the program SLOs?**

- o A course needs to address the program SLOs that the department faculty members have agreed it will address. Courses that address all program SLOs are usually culminating experiences such as capstones, internships, practicums, theses/dissertations, etc.

#### **Is a course limited to ONLY the program SLOs?**

- o No. A faculty member is free to include other course SLOs he/she deems suitable for the course in addition to any that align with the program SLOs.

<sup>1</sup> Adapted from University of West Florida, <http://uwf.edu/cutla/writingslo.cfm>

## Bloom's Taxonomy

Bloom's taxonomy is a well-known description of levels of educational objectives. It may be useful to consider this taxonomy when creating objectives. At the senior or graduate level, aim for *application*, *analysis*, *synthesis*, and *evaluation*.

<b>Knowledge</b>	To know specific facts, terms, concepts, principles, or theories
<b>Comprehension</b>	To understand, explain
<b>Application</b>	To apply knowledge to new situations, to solve problems
<b>Analysis</b>	To identify parts, relationships, and organizing principles; To identify the organizational structure of something
<b>Synthesis</b>	To create something, to integrate ideas into a solution, to propose an action plan, to formulate a new classification scheme
<b>Evaluation</b>	To judge the quality of something based on its adequacy, value, logic, or use

## “Action” Verbs

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
cite	arrange	apply	analyze	arrange	appraise
define	classify	carry out	break down	assemble	assess
duplicate	convert	change	calculate	collect	check
find	defend	compute	categorize	combine	choose
identify	describe	construct	compare	compile	compare
indicate	diagram	demonstrate	contrast	compose	conclude
know	discuss	discover	criticize	construct	contrast
label	distinguish	dramatize	debate	create	criticize
list	estimate	employ	deconstruct	design	critique
match	explain	execute	determine	devise	decide
memorize	extend	illustrate	diagram	formulate	discriminate
name	generalize	implement	differentiate	generate	evaluate
outline	give examples	interpret	discriminate	invent	experiment
recall	infer	investigate	distinguish	manage	grade
recognize	locate	manipulate	examine	modify	hypothesize
record	outline	operate	illustrate	perform	interpret
repeat	paraphrase	practice	infer	plan	judge
reproduce	report	predict	inspect	prepare	justify
retrieve	restate	prepare	interrogate	produce	measure
state	review	produce	inventory	propose	rate
underline	suggest	schedule	organize	rearrange	score
	summarize	shop	outline	reconstruct	select
	translate	sketch	question	reorganize	support
		solve	relate	revise	test
		translate			value
		use			
<i>Alternative Headings</i>					
<b>Remembering</b>	<b>Understanding</b>	<b>Applying</b>	<b>Analyzing</b>	<b>Creating</b>	<b>Evaluating</b>

Adapted from Gronlund, N. E. (1991). *How to write and use instructional objectives* (4<sup>th</sup> Ed.). New York: Macmillan Publishing Co. and Mary Allen Workshop (May, 2008) UHM

## ECONOMICS

### Program Outcomes

Upon program completion, students can

1. Economic literacy: Clearly explain core economic terms, concepts and theories.
2. Critical thinking: Demonstrate the ability to apply economic reasoning to contemporary social issues and policy problems.
3. Quantitative reasoning: Apply appropriate quantitative and statistical techniques. Conduct economic analysis using equations and graphs.
4. Reporting: Effectively communicate results of economic research and analysis to colleagues and decision-makers through written reports and oral presentations.

### ECON 130A: Principles of Microeconomics - Honors

Catalog Description: Examination of the decision-making process of both households and firms. Analysis of the functioning of a competitive market system, using supply and demand models and the role of government in cases where the market system fails. Additional topics include the effects of international rate on the welfare of a nation and the effects of different competitive market structures on society.

### Course Outcomes

Upon completion of this course, students can:

1. Explain the basic microeconomic terms, concepts and theories
2. Apply economic reasoning to real-world situations
3. Communicate economic reasoning to others in writing

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## BOTANY

### Program Outcomes

Student can

1. Define and describe the evolution, anatomy, morphology, systematics, genetics, physiology and ecology of plants.
2. Describe the unique ecological and evolutionary features of the Hawaiian flora.
3. Identify and analyze scientific problems and environmental issues using oral and written communication skills
4. Generate and test hypotheses, make observations, and collect data in the laboratory and in the field and analyze and interpret these results, derive conclusions, and report their findings.
5. Demonstrate expertise in contemporary research methods.
6. Describe how all scientific knowledge is continually developing and is dynamic; find new information and compare it with existing information.

### BOT 105: Introductory Ethnobotany

Catalog Description: Plants and their influence upon culture of Hawai'i and Pacific; uses of cultivated and wild plants

### Course Outcomes (excerpts)

1. Students will be able to describe ways in which plants and uses of plants have shaped past cultural and historical developments.
2. Students will be able to discuss and appreciate the roles of plants in their personal lives.
3. Students will be able to explain the critical roles that plants play in the modern world.
4. Students will be able to identify the basic elements of botanical sciences.

## ACADEMY FOR CREATIVE MEDIA (ACM)

### Program Outcomes

1. Critical Thinking
  - 1.1. Constructively critique their own and other's intellectual and creative work
2. Writing
  - 2.1. Write a creative work that tells a story
  - 2.2. Write a critical piece that applies theoretical principles
3. History and Aesthetics
  - 3.1. Know the intellectual history of cinema and place their work within that history
4. Professional Skills & Creativity
  - 4.1. Create a visual narrative through application of appropriate principles and production skills [production & animation]
  - 4.2. Conduct and communicate original research findings [critical studies]
  - 4.3. Understand the essential collaborative nature of creative productions by working as a team member
5. Ethics and Responsibility
  - 5.1. Understand the role and rights of a responsible artist

### ACM 460: Media Ethics

Catalog Description: Ethics and social responsibility for media professionals. Application of ethical theories and principles to case studies and research projects.

### Course Outcomes

At the conclusion of this course, students will be able to:

1. Constructively critique their own and other's intellectual and creative work.
  2. Write a critical piece that applies theoretical principles.
  3. Conduct and communicate original research findings.
  4. Articulate the underlying ethical theories and guiding principles that apply to mass communication.
  5. Identify and analyze contemporary ethical issues.
  6. Apply ethical standards to professional situation.
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## Global Environmental Science (GES)

### Program Outcomes

Students completing the Global Environmental Science degree program will be able to:

1. Define and explain the basic principles and concepts of chemistry, physics, biology, calculus, geology, geophysics, meteorology, and oceanography.
2. Apply their understanding of the fundamentals of science and mathematics to the description and quantification of the interactions of the atmosphere, hydrosphere, lithosphere, and biosphere, including humans.
3. Employ the scientific approach to problem solving, and hypothesis formation and testing.
4. Conduct scientific research, and analyze and evaluate results.
5. Demonstrate information literacy by collection and evaluation of scientific literature.
6. Express themselves clearly and concisely in written form.
7. Demonstrate skilled delivery of well organized informal and formal oral presentations.

### OCN 201: Science of the Sea

Course Description: Structure, formation, and features of ocean basins; seawater properties and distributions; currents; waves; tides; characteristics of marine organisms; marine ecological principles; man and the sea.

### Course Outcomes (excerpts)

Upon successful completion of the course:

1. Students will be able to identify the major pathways of chemicals to the oceans and the effect that biological processes have on redistributing and removing chemicals from the oceans.
2. Students will be able to describe the major processes that cause the deep and shallow circulation of water in the oceans.
3. Students will be able to identify the major marine habitats, the types of organisms that live in those habitats, and give examples of how organisms are adapted to their habitat.
4. Students will be able to describe the types of interactions that occur among organisms in the marine food web and between organisms and their environment.