HOW TO DEFINE AND WRITE LEARNING OUTCOMES

WHAT ARE LEARNING OUTCOMES?

Learning outcomes are statements that describe the knowledge, skills, and values/attitudes students should work to develop in a course or module. They say to students, "I designed the following lessons and activities to help you develop these skills or bodies of knowledge. If you do the work and take the feedback into account, you will become more practiced at these things. To pass this class, you have to demonstrate that you have developed these skills." For each course you teach, you will want to come up with 4-6 learning outcomes that summarize the overarching expectations you have of students. For each of the modules that make up a face-to-face, blended, or online course, you should have 3-4 learning outcomes and they should relate (or lead up) to the overall course-level learning outcomes.

It is a good idea to share learning outcomes with students. First, explicitly articulated learning outcomes give you and your students a clear, shared sense of what holds the course together. Second, communicating expectations with students is fair, helps avoid misunderstandings, and gives a reference point should grading problems arise. Third, learning outcomes set a (high) minimum standard for students to meet or exceed. Finally, learning outcomes provide a good blueprint for a module or course because they allow you to ensure course activities, assessments, and content are aligned in a coherent way. In a sense, learning outcomes are like thesis statements for course design!

HOW DO I DEFINE LEARNING OUTCOMES FOR MY MODULE OR COURSE?

You can begin by asking yourself the following sets of questions:
1. What is the purpose of this **module within the course**? Or what is the purpose of this **course within students' larger program** of study? Are there prerequisite modules or courses? Is this module or course a prerequisite for something else?
2. What **skills, knowledge, or values/attitudes** should students be cultivating through participating in this module or course?
3. Can I expect this outcome of **all** students who are allowed to register for this class regardless of background knowledge, cultural background, or other characteristics and abilities?
4. Which **domains of learning** does this module or course engage? How deep should students' learning be at this point in the course or program? (see page 2)
5. How much and what can I expect students to learn in one module or in one course?
6. What are the most important things students must **demonstrate** to get at least a passing grade for this module (for module-level outcomes) or course (for course-level outcomes)?

STEPS TO WRITING LEARNING OUTCOME

You can follow these steps to write a learning outcome:
1. Start with one **stem** to introduce the outcomes (see the list of possible stems below).
2. Use the four tables on the next pages to:
   a. identify the domain of learning you want students to work within,
   b. select the appropriate level of skill within the domain,
   c. read over the definition to make sure it is what you mean, and
   d. choose the **action word** that is best for your students and the context of the course.
3. Start with your action word and add specific content/attitude/behavior (**learning statement**).
4. Evaluate learning outcome (see page 4).
5. Revise as necessary.

LO FORMULA
LO = **stem** + **ACTION WORD** + **learning statement**

STEM OPTIONS
By the end of this course, students will be able to
By the end of this module, students should be able to
By the end of this class, successful students will be able to
In order to pass this course, students must demonstrate the ability to

EXAMPLE
By the end of this module, students should be able to
1. **DISTINGUISH** between Bloom's domains of learning.
2. **CONSTRUCT** course level learning outcomes using Bloom's taxonomy.
3. **ASSESS** course learning outcomes against degree level expectations.
4. **DEVELOP** methods to evaluate student achievement of learning outcomes.

DEPTH OF LEARNING	COGNITIVE DOMAIN
Higher order skills ↑ Lower order skills	Creating
	Evaluating
	Analyzing
	Applying
	Understanding
	Remembering

ACTION VERBS FOR COGNITIVE DOMAIN LEARNING OUTCOMES		
LEVEL NAME	**LEVEL DEFINITION**	**ACTION WORDS**
Creating	combine elements to develop new models/ideas	assemble, build, create, construct, design, develop, formulate, generate, hypothesize, invent, modify
Evaluating	assess effectiveness, coherence, rationale and make strategic judgments	appraise, assess, choose, compare, conclude, critique, defend, explain, justify, review, recommend, support
Analyzing	identify assumptions, key components, & internal relationships; infer main principles; structure information	break down, catalogue, compare, contrast, correlate, deconstruct, differentiate, dissect, extrapolate, infer, investigate, outline, separate
Applying	apply or relate information to new contexts	calculate, change, construct, compute, demonstrate, discover, execute, extrapolate, implement, manipulate, predict, show, relate
Understanding	know meaning of, and interpret or translate, information	critique, convert, describe, discuss, estimate, explain, formulate, interpret, infer, illustrate, justify, paraphrase, represent, summarize, translate
Remembering	recognize or recall facts, details, and information	define, identify, label, list, match, recall, recite, recognize, state

EVALUATING YOUR WRITTEN LEARNING OUTCOMES

You can use the checklist below to evaluate your learning outcomes for **clarity and specificity:**
- ❑ **S**pecific skill/value/content
- ❑ **M**easurable and demonstrable
- ❑ **A**ttainable by students at current level and matched to purpose of course
- ❑ **R**elevant for students, course, program, degree
- ❑ **T**imed appropriately for class length

RESOURCES

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