“Considerations for Writing Meaningful Course Learning Outcomes/Objectives”

What is a Course Learning Outcome or Objective?

A course learning outcome or objective (CLO) specifies a single behavior, skill or action that a student can demonstrate if they have achieved mastery of that objective. As such, a CLO needs to be written in such a way that they are measurable by some sort of evaluation. CLOs form the foundation of the class. Everything in the course should work together to ensure students master the CLOs.

1) Make your Course Learning Outcomes S.M.A.R.T.

The following are characteristics of strong course learning outcomes:

**Specific:** Do the outcomes focus on particular skillsets or information? Make outcomes as specific, focused and clear as possible for they will be easier to measure with your existing course deliverables (e.g. homework, reports, quizzes, exams and/or writing assignments).

**Measurable:** Words such as “know,” “understand,” and “learn” should be avoided. Bloom’s Taxonomy is your friend ([https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/](https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/)). It is acceptable for introductory courses to use the 2nd tier “Understand”, though it is helpful to work at the 3rd tier “Apply” or higher whenever possible.

**Achievable** (and Improvable): Can these be met within a reasonable timeframe? Is there room for improvement?
Relevant: Are you measuring skillsets or knowledge that give you information about student learning in the discipline? Is the information relevant for evaluating both the course and your program?

Time-framed: When were these CLOs last evaluated? When will they be evaluated again? Are you getting adequate information to evaluate your students and program?

An example of a good but specific CLO might be as follows:

This fill-in-the-blank example can help put this into context for your own subject matter:

If students have learned [knowledge/subject of the course], then they should be able to [specific action students can do if they know the content] by completing [assessment/proof of knowledge].

Example:

If students have learned [U.S. History since 1865], then they should be able to [explain the effect of immigration on American culture] by completing [an essay comparing and contrasting the effect of two immigrant populations on American culture from 1865-1900].

The course level objective here is: “Explain the effect of immigration on American culture.”

Other examples for good CLOs for STEM might be as follows:

“Students should have the ability to apply science and engineering in the analysis and evaluation of process engineering components and systems.”

“By the time students complete this course, they will possess the ability to plan experimental research and carry through with the collection and evaluation of experimental data.

A more specific example might be:

“If the students have learned the quadratic formula in MTH 2XXX, then they should be able to graph and factor quadratic equations by completing a series of questions without the use of a calculator.”

2) Relate evaluation methods and/or actions taken to the outcome.

If the outcome is that students will analyze literary texts in light of their historical, social, and cultural contexts, the evaluation for that outcome should be student work in which there is a literary analysis. In addition, if the assignment is being used to evaluate multiple outcomes, an explanation should be provided as to how that evaluation aligns with each outcome. Actions taken should be consistent with the results presented. For instance, if a student learning outcome or a program learning outcome is not met, it is not appropriate for the program faculty to do nothing to address the situation.