Quick Guide to Writing High-Quality Course Learning Outcomes

What are Student Learning Outcomes?
Student Learning Outcomes (SLOs) are **statements that reflect what you expect students to know and/or be able to do** by the end of the course. It's not what you're going to do; rather, it's what the student will be able to demonstrate. An easy way to revise an SLO is to start with the statement **"Students will be able to..."**. This focuses the SLO on measurable student behaviors.

Can I have some SLOs that are non-cognitive or affective?
Of course! **Not everything that is important can be measured,** and just because something is measureable doesn't necessarily mean it's important. However, there should be some way to determine whether students are meeting your criteria for success in a course.

What makes a high-quality SLO?
SLOs should be **measurable, meaningful, and they should provide you with evidence** that will lead you to answer questions such as "Are my students meeting my expectations for this course?" and "Are there areas in which students are consistently struggling and how can I address these patterns?" Course-level SLOs should align with broader program goals. **It's a good idea to ensure alignment by referring to the program SLOs (found on your department's website) when you create SLOs for a course.**

Examples of SLO revisions

Before:
Students will think critically.

After:
Students will be able to analyze and evaluate arguments.

Why is it better?
It's not possible to know whether students are thinking critically without some kind of demonstration. Analyzing and evaluating arguments is a concrete action that students will demonstrate in an assignment in the class.

Before:
Students will understand basic concepts related to planetary formation.

After:
Students will be able to describe the key characteristics of planetary formation.

Why is it better?
Again, this revision makes the SLO measurable. We cannot currently measure understanding (and understanding can mean very different things to different people). We can get a sense of understanding by looking at students' abilities to describe concepts.

Before:
Students will develop an appreciation for ballet.

After:
Students will be able to explain the importance of ballet in modern society.

Why is it better?
This revision takes the affective "appreciate" and parses it out a little bit. What does it mean to have an appreciation? What does that look like? This is one way to attempt to gain information about appreciation for a discipline.

The Big Picture

- Think about what you wants students to know and be able to do when they successfully complete your course.

- Start with the statement "Students will be able to..."

- Use measurable language. Bloom's taxonomy is a great place to start (see the attached table).

What if I have questions or need help?
Contact Lindsay Couzens, Director of Academic Assessment & Accreditation at 702-895-0407 or lindsay.couzens@unlv.edu. I'm always happy to meet with faculty to offer suggestions and assist in any way.

Bloom's Taxonomy for Writing SLOs (taken from UNC Charlotte, The Center for Teaching and Learning)

Level	Level Attributes	Keywords	Example SLO
1. Knowledge	Rote memorization, recognition, or recall of facts.	list, recite, define, name, match, quote, recall, identify, label, recognize	"By the end of this course, the student will be able to recite Newton's three laws of motion."
2. Comprehension	Understanding what the facts mean.	describe, explain, paraphrase, restate, give original examples of, summarize, interpret, discuss	"By the end of this course, the student will be able to explain Newton's three laws of motion in his/her own words."
3. Application	Correct use of the facts, rules, or ideas.	calculate, predict, apply, solve, illustrate, use, demonstrate, determine, model	"By the end of this course, the student will be able to calculate the kinetic energy of a projectile."
4. Analysis	Breaking down information into component parts.	classify, outline, break down, categorize, analyze, diagram, illustrate	"By the end of this course, the student will be able to differentiate between potential and kinetic energy."
5. Synthesis	Combining parts to make a new whole.	design, formulate, build, invent, create, compose, generate, derive, modify, develop	By the end of this section of the course, the student will be able to design an original homework problem dealing with the principle of conservation of energy."
6. Evaluation	Judging the value or worth of information or ideas.	choose, support, relate, determine, defend, judge, grade, compare, contrast, argue, justify, support, convince, select, evaluate	"By the end of the course, the student will be able to determine whether using conservation of energy or conservation of momentum would be more appropriate for solving a dynamics problem."