Some Useful Tips and Resources for Writing Student Learning Outcomes

I. The relationship between learning goals and learning outcomes:

- **Learning Goals** are general statements about the aims, values, or purposes of the curriculum and may lend themselves to multiple interpretations. Examples of learning goals include "critical thinking," "civic engagement," "knowledge of a discipline," or "problem-solving skills," or "understand the scientific method," etc.
- **Learning Outcomes** articulate what a student does that demonstrates progress toward these goals. Students should be able to reliably demonstrate this skill or competence upon completion of the program of study. Outcomes thus define how a student meets the programs learning goals as a result of completing the curriculum. An important caveat: the *process* by which a student learns is not the same as the outcome to be demonstrated. So "completing an internship," "study abroad," or "passing a comprehensive exam" are not learning outcomes, but the potential evidence that might be used to assess the learning outcomes.
- **Some examples:**

Learning Goal	**Learning Outcome**
Know the literature of the field	Develop a meaningful research question based upon the literature
Think critically	Interpret, analyze, or evaluate evidence, in order to construct arguments
Understand the scientific method	1) Generate hypotheses based on data 2) Design tests of the hypotheses
Understand interpretive approaches	Interpret texts using two or more of the following approaches: x, y, z
Be aware of different cultures	Describe different cultural assumptions

II. How to Write Learning Outcomes

Each outcome statements should:

- Describe fundamentally important elements of the course of study
- Be framed in terms of the whole program of study and not just individual courses
- Identify the learning to be demonstrated
- Use active verbs to identify how the learning is demonstrated
- Specify the criteria or standard for the learning demonstrated
- Be potentially measurable, even if it may be difficult to determine how this will happen
- Be assessable by multiple methods
- Not dictate the form of assessment to be used (so not, "will score 85% or above on standardized exam X")
- Express a single outcome; do not bundle together multiple outcomes in a single statement

III. Questions to Consider While Drafting Outcomes

- What does the ideal graduate of our program look like? What skills, values, knowledge, etc., would we like our ideal graduate to demonstrate?
- Do our outcomes express in a meaningful way our distinctive values?
- Have we considered national norms and expectations for graduates in our field?
- What common experiences do our students encounter in the curriculum?
- Do our outcomes reflect our existing curriculum?
- What standard should we expect our graduates to achieve for each expected outcomes?
- Are the outcomes appropriate for the student population, given their preparation and capacities?
- Does the language describe student rather than professor behaviors and actions?
- Does the language describe an outcome or the process by which learners meet the outcome?
- Will students be able to understand how these outcomes express important educational goals?
- Will students be able to understand whether or not they have met our expectations for them, and use the learning outcomes to assess their own progress toward a degree?

IV. Bloom's Taxonomy (Useful to Find Appropriate Active Verbs)

Bloom's Taxonomy of Cognitive Skills with Action Verb List					
Knowledge	**Comprehension**	**Application**	**Analysis**	**Synthesis**	**Evaluation**
Count	Associate	Add	Analyze	Categorize	Appraise
Define	Compute	Apply	Arrange	Combine	Assess
Describe	Convert	Calculate	Breakdown	Compile	Compare
Draw	Defend	Change	Combine	Compose	Conclude
Identify	Discuss	Classify	Design	Create	Contrast
Labels	Distinguish	Complete	Detect	Drive	Criticize
List	Estimate	Compute	Develop	Design	Critique
Match	Explain	Demonstrate	Diagram	Devise	Determine
Name	Extend	Discover	Differentiate	Explain	Grade
Outlines	Extrapolate	Divide	Discriminate	Generate	Interpret
Point	Generalize	Examine	Illustrate	Group	Judge
Quote	Give examples	Graph	Infer	Integrate	Justify
Read	Infer	Interpolate	Outline	Modify	Measure
Recall	Paraphrase	Manipulate	Point out	Order	Rank
Recite	Predict	Modify	Relate	Organize	Rate
Recognize	Rewrite	Operate	Select	Plan	Support
Record	Summarize	Prepare	Separate	Prescribe	Test
Repeat		Produce	Subdivide	Propose	
Reproduces		Show	Utilize	Rearrange	
Selects		Solve		Reconstruct	
State		Subtract		Related	
Write		Translate		Reorganize	
		Use		Revise	
				Rewrite	
				Summarize	
				Transform	
				Specify	