Establishing Learning Goals and Objectives

Difference between a Goal and a Learning Objective

Goals:
describe broad learning outcomes and concepts (*what you want students to learn*) expressed in general terms.

Objectives:
describe specific learning behaviors (skills, values, and attitudes) and knowledge that students should exhibit by the end of the course. Objectives transform goal generalizations into specific student performance and behaviors that demonstrate student learning and skill development.

GENERAL → **SPECIFIC & MEASURABLE**

Questions to help you identify course goals:

- What do you want your students to learn and in what ways do you want them to grow?
- If you ran into a student who had taken your class the previous semester, what would you hope the student would say about what she/he took away from your course?

If you are redesigning your course also consider:

- What do your students usually learn and in what ways do they usually grow?
- Where do students have difficulty; what do they consistently not get?
- Why do you currently use assignments, course structure, and activities? What is it you want to help students learn through these course elements?

Why are Learning Objectives important?
Objectives guide the…

1. Selection of course content
2. Development of an instructional strategy
3. Development & selection of instructional materials
4. Construction of assessment instruments for assessing and then evaluating student objectives.

Questions to help you identify course objectives:

- For each of your stated goals, what are the specific student behaviors, skills, or abilities that would tell you this goal is being achieved?
- How will you know your students are achieving the major goals you have set out for them? What evidence would indicate that your students have met the goals?

Learning Objectives:

- Define a goal
- Focus on student performance
- Focus on product
- Are assessable
- Use verbs that specify behaviors
- Use simple language
- Indicate level of attainment
- Are realistic and achievable

Adapted from: the University of Massachusetts-Amherst, COURSE-Based Review and Assessment, OAPA Handbook http://www.umass.edu/oapa/oapa/publications/online_handbooks/course_based.pdf and Arreola, R.A. (1998) *Writing Learning Objectives: A Teaching Resource Document*, The University of Tennessee. http://www.uwo.ca/tsc/graduate_student_programs/pdf/LearningObjectivesArreola.pdf

Examples of Course Goals and Learning Objectives

GOAL: Students will learn how to consistently and skillfully use critical thinking to comprehend the world and reason about situations, issues, and problems they confront.

Learning Objectives: Students will learn how to do the following:

1. *Identify* the elements of reasoning when thinking about personal, professional, and civic situations, issues, and problems: its purpose(s), the question(s) to be answered or problem(s) to be solved, the requisite information or evidence required, inferences made and assumptions they are based on, concepts and principles being used, implications or consequences of the reasoning, and points of view or frames of reference being used;
2. *Skillfully use* the universal intellectual standards of clarity, accuracy, relevance, precision, logicality, breadth, depth, completeness, significance, and fairness to assess and evaluate the quality of reasoning used when considering each the elements of reasoning in Objective One;
3. *Reliably and consistently engage* in rational thinking by recognizing and avoiding their own and others' egocentric and sociocentric biases; and
4. *Exhibit* the intellectual traits or dispositions of intellectual humility, intellectual autonomy, intellectual integrity, intellectual perseverance, intellectual courage, confidence in reason, intellectual empathy, and fair-mindedness.

GOAL: Students will learn how to reason and act in a consistently ethical fashion with respect to other people, animals, and the natural environment.

Learning Objectives: Students will learn how to do the following:

1. *Distinguish* among examples of complex reasoning based on ethical principle, religious dogma, legal prescription, and social conditioning, including traditional customs and political propaganda;
2. *Identify* the elements of reasoning (purpose of the reasoning, question to be answered, information needed, concepts and principles required, assumptions being made, points of view that should be considered, inferences made and conclusions drawn, and implications for self and others of these and other possible conclusions);
3. *Analyze* reasoning about complex ethical dilemmas, using the above identified elements of reasoning;
4. *Analyze* reasoning about complex moral dilemmas in terms of their clarity, accuracy, precision, depth, breadth, logic, and significance;
5. *Discern* moral content and determine a principled ethical course of action, using the analyses in Objectives 2, 3, and 4;
6. *Exhibit* respectful behavior toward other people, animals, and the natural environment that is consistently characterized by the traits of humanity, empathy, fair-mindedness, integrity, ethical perseverance, and ethical courage.

GOAL: Students will learn how to become involved and act responsibly and with informed awareness of contemporary issues in a community and to develop leadership abilities.

Learning Objectives: By the end of this course, students should be able to do the following:

1. *Assess* their own knowledge and skills in thinking about and acting on local issues;
2. *Analyze* community issues and develop strategies for informed response;
3. *Evaluate* personal and organizational characteristics, skills, and strategies that facilitate accomplishment of mutual goals; and
4. *Apply* their developing citizenship skills in a community setting.

GOAL: Students will learn how to use concepts and principles of ecology, together with plausible evidence, to describe the interactions of organisms with their environments and with each other.

Learning Objectives: Students will learn how to do the following:

1. *Demonstrate* that organisms are both interdependent and dependent on their environments, using specific examples from various major taxa as well as from marine, freshwater, and terrestrial environments;
2. *Show* how ecosystems consist of populations of organisms, together with abiotic inputs, nutrient cycles, energy cycles, and limiting factors;
3. *Explain* how species and populations interact in a dynamic fashion in communities;
4. *Propose* one or more hypotheses that plausibly suggest how different species can occupy the same ecological niche, and support the hypothesis or hypotheses with convincing evidence;
5. *Show* how the various world biomes reflect global physical and biotic diversity;
6. Use the concept of ecological succession to explain temporal changes in communities and ecosystems; and
7. *Demonstrate* the range of human impacts on the natural environment, together with their specific causes.

GOAL: This course is intended to equip students with skills needed to locate, gather, and use information intellectually and responsibly.

Learning Objectives: By the end of this course, students should be able to accomplish the following:

1. *Demonstrate* the ability to locate and gather information through libraries, the world wide web, and "field" research methods, such as interviews and surveys;
2. *Evaluate* the sources of information;
3. *Analyze, summarize, and synthesize* information from diverse sources;
4. *Apply* information gained through research to a given situation;
5. *Communicate* to others information, conclusions, and arguments through writing and the use of tables, graphs, and other visual rhetoric; and

6. *Appropriately cite* sources of information.

GOAL: By the end of this course, the successful student will understand the scientific method.

Learning Objectives: By the end of this course, the successful student will be able to do the following:

1. *Distinguish* between a hypothesis, a theory, and a law;
2. *Define* each of the above from a scientific experiment;
3. *Outline* the steps of the scientific method for each lab experiment;
4. *Generate* predictions, based on the outcomes of each lab experiment; and
5. *Maintain* the distinction between predicted and observed results, even if the lab experiment fails to produce the expected results.

GOAL: The successful student in this course will be able to argue as a professional historian does.

Learning Objectives: The successful student in this course should be able to do the following:

1. *Take* a position on a debatable historical issue;
2. *Use* historical data as evidence for the position;
3. *Raise and answer* counterarguments;
4. *Appropriately summarize, synthesize, and cite* sources of historical data in making historical arguments.