What are learning goals?
Program learning objectives are brief, clear, focused statements of intended learning outcomes. Learning objectives come from program goals; they focus on students rather than curriculum. Each objective should be defined with outcomes assessment criteria in mind for “measuring” how well each objective has been accomplished.
[Sources: Fresno State University; Western Washington University]

Where and when do I submit my learning goals?
All programs will receive a survey by email to submit their learning goals. Programs that have previously submitted learning goals will be able to review and modify their goals, if needed. Those programs which have not yet submitted their learning goals can do so via this survey mechanism. Learning goals should be submitted by December 31, 2012. Please contact Associate Dean Scott Herness if you expect delays.

In writing your learning goals it may be helpful to remember:
- Programs will not be “locked in” to these learning goals. Learning goals can be revised at any time.
- Masters and PhD programs in a discipline can have the same learning goals with different levels of expected competence.
- Programs will not be reviewed based on the success of achieving their goals. Assessment plans are meant to be internal evaluative tools for your own benefit.
- Concrete verbs [define, argue, create, identify, explain, construct, solve, design] are more helpful for assessment than vague verbs such as know or understand.
- Learning goals may take multiple forms:

<table>
<thead>
<tr>
<th>Cognitive Outcomes</th>
<th>What do you want your graduates to know?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Outcomes</td>
<td>What do you want your graduates to be able to do?</td>
</tr>
<tr>
<td>Affective Outcomes</td>
<td>How do you want your graduates to relate to their work and to others?</td>
</tr>
</tbody>
</table>
How many learning goals should I submit?
Submit just enough to cover your discipline. Three to five goals are often sufficient.

An Example of Good and not-so-good learning goals

**Poor:** Ph.D. students of Hypothetical Engineering will be successful in their research.

This statement is very vague and provides no indication of what “successful” means. It does not specify what type or quality of research skills are expected from the student.

**Better:** Ph.D. students of Hypothetical Engineering will be successful in conducting high-quality research.

Although the quality of research expected from the doctoral students is identified, there is no indication of specific research capabilities that a student should possess. Therefore, even though it provides more detail than the previous statement, it is still lacking.

**Best:** Ph.D. graduates of Hypothetical Engineering will be able to conduct high-quality, doctoral research as evidenced by their results of experiments and projects, dissertations, publications, and technical presentations.

What is expected of a doctoral student in this program is clearly defined and stated, making this an effective learning outcome statement. The quality of research expected as well as the specific research requirements are articulated in the outcome statement.

[See An Example from Assessment Workbook 2012 (Ball State University, Office of Institutional Effectiveness) for additional examples.]

Can I get more help?
Many helpful resources are available on the website of the National Institute for Learning Outcomes Assessment (http://www.learningoutcomeassessment.org). Included on this website are links to helpful workbooks from:

- University of Massachusetts [Click here for the U MASS Workbook]
- Western Washington University [Click Here for the West Washington Workbook]
- Ball State University [Click here for the Ball State University Workbook]

What if I have questions?
Contact Associate Dean Scott Herness in the Graduate School [herness.1@osu.edu].
Examples

1. Graduate School / University-level Goals from Other Universities

   a. University of Florida (Graduate Student Learning Outcomes)
      Graduate students at the University of Florida will demonstrate or achieve:
      i. Knowledge: by a thorough understanding and comprehension of subject matter relevant to the discipline
      ii. Skills: by applying, analyzing, and synthesizing content knowledge to solve problems by identifying component parts, relationships and ideas
      iii. Professional Behavior: by displaying ethical behaviors, cultural sensitivity, teamwork, professional conduct and communication

   b. Michigan State University (Graduate School)
      i. Acquire advanced knowledge and a deeper understanding of the skills and knowledge in their disciplines
      ii. Develop a sense of responsibility to as well as an understanding of the ethical dimensions of the discipline
      iii. Develop the competence, knowledge, and independence for the realization of leadership potential

   c. Rutgers, The State University of New Jersey, New Brunswick (PhD Learning Goals in the Graduate School)
      http://gsnb.rutgers.edu/faculty/phd_goals.pdf
      i. Attain marked ability, scholarship and research skills in a broad field of learning
      ii. Engage in and conduct original research
      iii. Prepare to be professionals in their discipline

2. Program-specific Goals: OSU examples (submitted during calendar conversion)

   d. OSU (Arts and Sciences): Comparative Studies-MA: Students develop teaching skills in beginning-level classes (one of three goals submitted).

   e. OSU (Arts and Sciences): Comparative Studies-PhD: Students develop teaching skills in intermediate and advanced classes (one of three goals submitted).

   f. OSU (Arts and Sciences): East Asian Languages and Literatures-PhD: Students demonstrate the ability to engage critically with the scholarship and theory of the field and discipline (one of five goals submitted).

   g. OSU (Arts and Sciences): Economics-PhD (Proficiency): to attain technical proficiency to work with advanced models in microeconomics, macroeconomics and econometrics; to innovate models or analysis in
chosen field of specialization; and to communicate economics ideas and issues *(one of four goals submitted)*.

h. OSU (Arts and Sciences): Music-MM: Students demonstrate intermediate proficiency in violin, viola, cello, string bass, flute, oboe, clarinet, saxophone, bassoon, trumpet, horn, trombone, tuba, percussion, harp, voice, or piano *(one of five goals submitted)*.

i. OSU (Professional Colleges): Accounting-MA: Graduates will be competent in and able to apply the basic technical and institutional knowledge of the discipline of accounting *(one of four goals submitted)*.

j. OSU (Professional Colleges): Food Science and Technology-PhD: Students will exhibit effective professional skills including leadership, written and oral communications, time management, and teamwork—performed in an ethical manner *(one of five goals submitted)*.

k. OSU (Professional Colleges): Materials Science and Engineering-PhD: Synthesize scientific and engineering fundamentals to advance materials science and engineering through creative scholarship *(one of five goals submitted)*.

l. OSU (Professional Colleges): Nutrition-PhD: Critical Thinking: Students will use critical thinking, evidence-based principles and current information to analyze situations, issues & problems *(one of eight goals submitted)*.

m. OSU (Health Sciences Colleges): Medicine-MD: The student is able to: exemplify the ethics, values and behaviors of the medical profession; demonstrate broad knowledge of fundamental science, principles, and processes basic to medicine and apply this in a judicious and consistent manner to prevent common health problems and achieve effective and safe patient care; use effective listening, observational, and communication techniques in all professional interaction *(three of twenty-three goals submitted)*.

n. OSU (Health Sciences Colleges): Occupational Therapy-MO: Each graduate will analyze, synthesize, apply research related to occupational therapy practice and participate in research projects *(one of six goals submitted)*.

3. Program-specific Goals: Other universities

   a. University of Arizona: Linguistics:
      i. Demonstrate the ability to design and conduct original research.
ii. Evaluate existing scientific data and scientific literature.
iii. Collect, organize and interpret scientific data
iv. Communicate the results of their work in oral and written forms

b. University of Arizona: Physics:
i. Physics Ph.D.’s should have deep knowledge of the theories that form the basis of classical mechanics, electromagnetism, quantum mechanics, and statistical mechanics. Additionally, they should have extensive knowledge of one or more specialized fields such as condensed matter physics, AMO physics, biophysics, astrophysics, nuclear physics or particle physics.
ii. Physics Ph.D.’s in experimental subfields should be able to design and conduct original experiments in order to investigate physical phenomena. They should be able to analyze data and publish these results in scientific journals.
iii. Physics Ph.D.’s in theoretical subfields should be able to construct original theories in order to explain or predict physical phenomena. They should be able to describe and publish their work in scientific journals.
iv. Physics Ph.D.’s should be prepared to follow a career path towards quality positions in academia or assume leading technical roles in a variety of industries.

c. Cornell University: Animal Science: At completion of the Ph.D. degree, a student should be able to:
i. Make an original contribution to the field.
ii. Demonstrate in-depth knowledge in an area of expertise.
iii. Demonstrate broad knowledge across several areas in the field.
iv. Follow ethical guidelines for working in the field.
v. Effectively communicate to professional and lay audiences about concepts in the field.

vi. Cornell University: English Language and Literature: When students complete the PhD they should be able to:
i. demonstrate in-depth knowledge of one major concentration in the field, and competency in one or two other minor areas of concentration, and/or interdisciplinary affiliations
ii. demonstrate advanced research skills, including broad knowledge of a range of critical and theoretical approaches relevant to their field of research.
iii. make an original and substantial contribution to the field, and produce publishable scholarship in a timely fashion.
iv. communicate research findings effectively in written and spoken presentations.
v. follow ethical guidelines for work in the field.
vi. demonstrate effective skills in undergraduate teaching and potential for graduate teaching.