

Assessment Guidance for Graduate Programs Defining Learning Outcomes

Learning Outcomes (LOs) are the specific knowledge, skills, and values students should acquire upon successful completion of a program of study. They are the competencies required for a student to graduate and succeed in their chosen profession or continued studies.

At the graduate level, student learning outcomes typically address the following areas:

- Depth and breadth of disciplinary knowledge [Disciplinary Knowledge]
- Critical inquiry and research skills [Research]
- Oral and written communication skills [Communication]
- Ethical and responsible behavior [Ethics]
- Ability to teach effectively in the discipline [Pedagogy]

While these areas are applicable to a majority of graduate programs, the specific knowledge and skills students are expected to acquire within each area can differ depending on whether a degree is more research oriented or is focused on professional roles within a particular industry. The different characteristics of these degree types are presented below in Table.

Table 1: Characteristics of Research and Professional Degree Programs

	Research	Professional
Focus	Research-oriented, original contributions	Career-oriented, practical applications
Coursework	Theoretical foundation, research methodologies	Emphasis on specific knowledge and skills
Dissertation/Thesis	Requires original research and a dissertation	May require a final project or thesis
Career Opportunities	Opens doors to academic, research leadership, and specialized roles	Prepares for professional roles in various industries
Outcome	Contribution to the existing body of knowledge	Advanced expertise in a specific field

Adapted from: <https://www.collegeessayguy.com/blog/masters-vs-phd#C>

This table is provided as a general reference only. Programs may want to develop their own list that can be used to guide in drafting learning outcomes for their graduate students.

Example Learning Outcomes for Graduate Programs

Many institutions have adopted global LOs that apply to all graduate level programs. Below are some examples of such LOs, organized by the areas identified above. These LOs may be adopted as written or modified to include discipline specific information. Examples of discipline specific LOs are provided in the Appendix.

Disciplinary Knowledge

- Students will demonstrate proficiency/mastery of the subject matter.
- Students will demonstrate advanced knowledge in a specialized area consistent with the focus of their graduate program.
- Students will be able to apply advanced knowledge, skills, and values appropriate to the discipline.

Research

- Students will be able to utilize critical thinking and awareness to understand and solve a problem.
- Students will be able to apply existing research methodologies and techniques to address fundamental questions in their primary area of study.
- Students will be able to design and implement a sound study using appropriate methods, measures, and techniques.

Communication

- Students will be able to communicate effectively in written and oral formats.
- Students will be able to produce written and oral communications of quality consistent with the focus of their graduate program.
- Students will be able to communicate clearly, accurately, and professionally to disseminate scientific concepts and research results in visual, oral, and written form to diverse audiences.

Ethics

- Students will conduct scholarly and/or professional activities in an ethical manner.
- Students will practice responsible conduct of research.
- Students will be able to identify the importance academic and professional integrity standards.

Pedagogy

- Students will demonstrate the ability to effectively teach or assist in teaching.
- Students will participate in classroom pedagogy consistent with undergraduate education in the associated major.
- Students will be able to design high-quality undergraduate and graduate courses, including appropriate goals, readings, audiovisual materials, assignments, and sequencing.

Additional Assistance

Additional resources can be found on the Office of Institutional Effectiveness website at https://www.southalabama.edu/departments/institutionaleffectiveness/academic_program_assessment_reporting_resources.html. You can also contact us at assessment@southalabama.edu.

Appendix

Discipline Specific Examples of Student Learning Outcomes

Unless otherwise noted, all examples were selected from 2022-23 assessment plans for University of South Alabama graduate programs. Examples may have been edited for clarity, consistency, and completeness.

Biology MS

1. Students will illustrate expertise in a chosen area of individualized study.
2. Students will be able to apply critical thinking skills to problem solve.
3. Students will demonstrate an ability to apply the Scientific Method through an individualized, original thesis research project.
4. Students will be able to produce technical written and oral communications.
5. Students will illustrate a breadth of basic biological knowledge through effective instruction of students at the undergraduate level.

Clinical Mental Health Counseling MS (Selected subset of outcomes)

1. Students will demonstrate professionalism and ethical reasoning.
2. Students will identify and describe theories and models of multicultural counseling, cultural identity development, and social justice and advocacy.
3. Students will be able to apply theories and models of career development, counseling, and decision making.
4. Students will demonstrate basic counseling skills to include essential interviewing, counseling, and case conceptualization skills.

English MS

1. Students will be able to apply critical method/theory and synthesis appropriate scholarly sources in a written document using close reading and literary analysis.
2. Students will be able to synthesize discipline-based information into oral presentations.
3. Creative writing students will be able to apply a high level of the conventions of their thesis genres – fiction, poetry, creative non-fiction, and/or screen writing.

Information Systems MSIS

1. Students will be able to design and develop structured query language (SQL) statements and entity-relationship diagrams (ERDs) for advanced modeling scenarios.
2. Students will demonstrate master project planning in multiple areas: project planning methods, leadership, stakeholder management, and technology.
3. Students will be able to design and implement a web-based model-viewer-controller application with database connectivity, full create/read/update/delete functionality, and well-designed graphical user-interface.

Audiology AuD

1. Students will apply foundational audiology concepts to meet standards of independent professional practice.
2. Students will employ evidence-based and valid decision-making skills in a clinical setting.
3. Students will exhibit professionally appropriate behavior in clinical settings.
4. Students will demonstrate proficiency in written communication in clinical settings.

Clinical and Counseling Psychology PhD

1. Students will demonstrate comprehension of advance concepts, theories, facts, information, research findings, principles, and best practices in clinical and counseling psychology.
2. Students will demonstrate their understanding or and ability to apply advanced knowledge of research methods and statistics in clinical and counseling psychology.
3. Students will apply the information and skills they have learned in the conduct of Health Service Psychology practice activities including assessment, intervention, consultation, and clinical supervision.

Marine Sciences PhD

1. Students will be able to explain and discuss in-depth the foundational principles of 3 of the 4 core components of Marine Science: Biological, Chemical, Geographical, and Physical Oceanography.
2. Student will be able to effectively review and synthesize literature specific to their field of study.
3. Students will be able to apply the appropriate methods needed to address a research question.
4. Students will be able to conduct basic level technical computing as related to their particular field.
5. Students will be able to derive evidence-based conclusions through the objective analysis and interpretation of data.
6. Students will demonstrate the ability to orally communicate concepts and methodology of their field.
7. Students will demonstrate the ability to communicate concepts and methodologies of their specialization through written materials.
8. Students will demonstrate an understanding of ethical conduct and best practices in the scientific community.