

PhD Program Learning Outcomes by Year

Program Learning Objectives/Competencies

Biomedical Scientific Knowledge

1. Demonstrates advanced knowledge of biomedical sciences concepts.
2. Demonstrates advanced knowledge of discipline-specific concepts.
3. Critically evaluates biomedical sciences literature.

Research and Analytic Skills

1. Develops testable hypotheses.
2. Selects and utilizes appropriate technical and conceptual approaches to design experiments.
3. Uses scientific rigor and reproducibility to ensure accurate data analysis and interpretation.

Communication Skills

1. Demonstrates effective written communication.
2. Demonstrates effective oral communication.
3. Demonstrates effective teaching and mentoring.

Professionalism, Collegiality and Career Development

1. Demonstrates ethical behavior in alignment with professional codes of conduct, including institutional compliance.
2. Establishes rapport with others that encourages a team-based, goal-oriented environment.
3. Engages in independent learning and networking.

Program Outcomes

1. Students in the PhD program in biomedical sciences will have a low attrition rate and a short time to graduation based upon national averages.

Assessment Outcomes

Direct Assessment: Course Exams and Milestones	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030
Direct Assessment Targets (Biomedical Scientific Knowledge)							
Greater than 80% of PhD students will achieve >80% on exams in BMSC 6201, BMSC 6202, BMSC 6203, and BMSC 6204.	6201: 83% 6202: 84.6% 6203: 69.2% 6204: 76.9%						
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their Oral Qualifying Exam for the Biomedical Scientific Knowledge competency.	100% of the students met the stated goal						
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their research proposal for the Biomedical Scientific Knowledge competency.	100% of the students met the stated goal						
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their annual progress report for the Biomedical Scientific Knowledge competency.	98.4% of the students met the stated goal						
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their final thesis defense for the Biomedical Scientific Knowledge competency.	100% of the students met the stated goal						
Direct Assessment Targets (Research and Analytic Skills)							
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their Oral	83.3% of the students met						

Qualifying Exam for the Research and Analytic Skills competency.	the stated goal						
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their research proposal for the Research and Analytic Skills competency.	100% of the students met the stated goal						
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their annual progress report for the Research and Analytic Skills competency.	96.8% of the students met the stated goal						
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their final thesis defense for the Research and Analytic Skills competency.	100% of the students met the stated goal						
Direct Assessment Targets (Communication Skills)							
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their Oral Qualifying Exam for the Communication Skills competency.	100% of the students met the stated goal						
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their research proposal for the Communication Skills competency.	100% of the students met the stated goal						
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their annual	98.4% of the students met						

progress report for the Communication Skills competency.	the stated goal						
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their final thesis defense for the Communication Skills competency.	100% of the students met the stated goal						
<i>Direct Assessment Targets (Professionalism, Collegiality and Career Development)</i>							
Greater than 90% of PhD students will achieve "meets expectations" or "exceeds expectations" on their annual progress report for the Professionalism, Collegiality and Career Development competency.	96.8% of the students met the stated goal						
<i>Direct Assessment Targets (Attrition Rate)</i>							
Less than 5% of PhD students will withdraw per year.	2.5% of PhD students withdrew						
<i>Direct Assessment Targets (Time to Graduation)</i>							
The time to graduate for PhD students will be less than 6 years.	Average time to graduation was 4.47 years						