

Student Name: _____
 Student UIN: _____
 Program: _____

BIMS Graduate Program
Learning Outcomes Assessment
 ~ Final Rubric ~

Faculty Name: _____
 Committee Role: _____
 Date: _____

Besides completing the Report of the Final Exam form required by the Texas A&M University Graduate and Professional School, each committee member will complete this rubric through which the Biomedical Sciences Graduate Program can capture how successfully students master the program's learning outcomes.

Please evaluate the student's achievement of the following learning outcomes as appropriate for the level of their degree (enter a 0 when not observable):

<i>Effective Oral and Written Communication</i>	Mastery (5)	Proficient (4)	Acceptable (3)	Emerging (1 or 2)	Score
Exhibits effective oral communication skills	Prepared with full command of the topic and connects with the audience; clear and coherent in every part; strong visually and verbally	General command of the topic with few problems engaging audience; objectives and information clear; minor revision needed	Basic presentation with some audience engagement, lack of detail but informative, and moderate revision necessary	Substantial difficulty engaging audience, expressing clear and coherent thoughts, and speaking words	
Exhibits effective written communication skills	Fully identifies all relevant knowledge, methods, process, and findings that lead to clear and abstract conclusions	Demonstrates basic understanding of each aspect of research but lacks breadth or depth	Fundamentally sound writing yet insufficient detail in multiple sections or critical areas	Omits substantial elements of research; lack of clarity/limited detail throughout	
<i>Mastery and Integration of Knowledge</i>					
Demonstrates an appropriate breadth and depth of discipline-specific knowledge	Exhibits familiarity with all directly relevant and inter-disciplinary knowledge	Demonstrates a clear understanding of the knowledge base and principal concepts	Average level of understanding, limited to the main topics covered in curriculum	Beginning level of understanding, lacks command of the basic knowledge base	
Applies discipline-specific and broader knowledge in a range of contexts and critical decision-making	Engages in a forward-thinking discussion about the primary field and closely related concepts from other areas make an impact	Explains in detail how disciplinary knowledge and prior research in the field contributes to their study; fully aware of the implications of the current project fits in the discipline	Addresses questions from multiple fields confidently but vaguely or with limited and some incorrect detail	Rarely includes or cites established knowledge in the field; fails to integrate disciplinary knowledge with relevant research and scholarship from other fields	
<i>Research Skills</i>					
Successfully develops hypothesis-driven research	Forms hypothesis and experimental design to establish a long-term and scientifically significant research agenda	Develops a convincing hypothesis and relevant research project	Coherent hypothesis but weak experimental design	Fails to clearly state a hypothesis or defend their own hypothesis	

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<i>Research Skills (cont.)</i>	Mastery (5)	Proficient (4)	Acceptable (3)	Emerging (1 or 2)	Score
Conducts methodologically sound and data-supported research	Shows a thorough understanding of the methodology and relevancy of the data; discerns why this was the preferred approach	Explains methodology and research design with attention to rigor and reproducibility	Identifies research design and methods but does not justify their selection or effectiveness	Lacks comprehension of the methods and data collection needed in relation to the hypothesis	
Effectively participates as a member of a research team	Contributes to lab by originating discussion topics and presenting new/innovative ideas from professional development activities	Engages in discussion that supports lab and individual progress on research projects; participates in all scheduled meetings	Attends scheduled lab meetings with only occasional absences; offers ideas when directly involved in the project	Rarely contributes with input or feedback on team projects; may even lack decorum or become hostile to others in the lab	
Exhibits independence as a researcher	Demonstrates the self-efficacy to acquire the knowledge, skills, and abilities to persist in research activity; motivated to engage in new and innovative approaches	Takes initiative and is persistent in being productive in research activity; completes all degree milestones on time and may achieve more than expected in that timeframe	Makes satisfactory progress on individual project(s) while still asking questions and accepting necessary critique and guidance; will accept additional tasks	Lacks initiative to engage fully in one's own research and training; makes little or no progress without specific direction	
<i>Ethical Reasoning</i>					
Follows all biosafety, animal use, and other relevant practices	Develops the research design in accordance with responsible conduct of research; gains all approvals prior to initiating research and ensures compliance from start to finish	Learns policies and practices prior to engaging in research and completes all trainings; resolves ethical concerns as they arise	Identifies ethical issues but may or may not resolve the ethical concern before corrective action is necessary; completed all required trainings	Fails to participate in required training and obtain necessary approval prior to conducting regulated research activity	
Chooses ethical courses of action in research and practice	Recognizes ethical issues and formulates an approach prior to engaging in research	Comprehends the ethical issues and seeks a resolution	Identifies and attempts to respond to ethical issues	Fails to identify ethical issues	

COMMENTS: