



### Biomedical Engineering PhD Outcomes Assessment Rubric

To be completed by committee chair in consultation with exam committee.

Student: \_\_\_\_\_ Degree program/concentration: \_\_\_\_\_

Date: \_\_\_\_\_

Outcome	Unacceptable (1)	Marginal (2)	Acceptable (3)	Exceptional (4)	Rating
<b>1) Knowledge of Biomedical Engineering fundamentals appropriate for discipline and specialization</b>	No evidence of PhD-level fundamental knowledge in Biomedical Engineering.	Rudimentary knowledge of Biomedical Engineering exhibited in written document and oral presentation.	Knowledge of Biomedical Engineering fundamentals evident in written and oral presentation.	Demonstrates mastery of appropriate fundamentals of Biomedical Engineering.	
<b>2) Depth of knowledge in specialization</b>	Only rudimentary knowledge in specialization.	Some knowledge of specialization demonstrated.	Demonstrates appropriate level of knowledge in specialization.	Demonstrates knowledge of specialization comparable to experienced practitioner.	
<b>3) Ability to conduct original and independent research</b>	No evidence of planning and execution of research program.	Some useful research results with some evidence of original work.	Carried out good research program, achieved useful and novel results.	Excellent planning and execution of research program. Excellent results.	
<b>4) Ability to perform critical review of literature in Biomedical Engineering and area of specialization</b>	Rudimentary literature review.	Some review of the literature, but little critical evaluation.	Comprehensive review of literature with evidence of critical thinking about further needs for research in this area.	Extensive review of literature with critical evaluation comparable to a review article in literature.	
<b>5) Able to communicate effectively</b>	Dissertation poorly written. Oral exam not well planned or presented. Unable to answer questions.	Dissertation mostly clearly written. Presented main points clearly. Able to answer some but not all of the questions posed by committee.	Well written and well organized dissertation. Well organized and clear presentation. Good ability to answer questions.	Excellent job of writing and organizing dissertation. Well organized talk. Able to respond to questions and facilitate further discussion of results.	
<b>Overall Assessment</b>	<b>Unacceptable (1)</b>	<b>Marginal (2)</b>	<b>Acceptable (3)</b>	<b>Exceptional (4)</b>	

Comments (use back if necessary):

What curricular or process changes can you suggest to improve student performance in these areas (use back if necessary)?