### Weldon School of Biomedical Engineering

## PhD Qualifying Examination and Mentoring-Committee Rubric – for all Committee Members

[The first part of this form must be submitted (based on the written documents) to the Chair at least 48 hours prior to the scheduled exam/mentoring meeting. The remainder of the form will be completed during the meeting]

Student Name:

Committee Member: Committee Chair:

### <u>Common Breadth of Biomedical Engineering Knowledge (review student self-evaluation on Cover Sheet):</u>

	Appropriate	Needs	Comments (if needed)
		Discussion	
Cell biology, Biochemistry, Anatomy, and/or			
Physiology			
Programming			
Signal Processing			
Numerical Computation			
Experimental Design and Statistics			
Data Science (including aspects of Open-Science)			
Engineering Design			
Diversity, Equity, and Inclusion considerations for Biomedical Engineering			

# Expectations for Qualifying Exam:

	Exceeds	Meets	Improvements	Fails to Meet Minimal
	Expectations	Expectations	Needed	Expectations
PROPOSAL	1	1		
Critical analysis and synthesis of literature				
Gap or needs identification				
Development of a significant and specific research question with a testable				
hypothesis to address the gap/need				
Appropriate and realistic experimental design to test the hypothesis (in the				
form of a Research Strategy - not to level of thesis Specific Aims)				
Consideration of caveats, potential problems, and alternative approaches				
Ethical Considerations in the Conduct of Research				
Appropriate Timeline proposed				
Written Technical and Scientific Communication				
Oral Technical and Scientific Communication (complete at ORAL EXAM)				
RESEARCH PROGRESS				
Technical depth in fundamental principles in student's research area				
Critical analysis and interpretation of data				
Appropriate level of independence				

### Do you have concerns about plagiarism in the Written Document?

\_\_\_\_ No concerns;

\_\_\_\_\_ Minor concerns (needs more guidance); \_\_\_\_\_ Multiple concerns (meeting needed)

### CHAIR ONLY (Chair will need to report this on the student's assessment:

Date of Screening: Similarity Index (in %): Additional Comments: Confidential Comments to the Chair (e.g., list any specific issues you want to pursue in Oral Exam):

Committee Member Signature:

Date:

Has IDP been provided and discussed with committee (Y/N): Comments/Suggestions (if any):

<u>Career Path Options discussed:</u> <u>Academic;</u> <u>Industry;</u> <u>Clinical;</u> <u>Global Health;</u> <u>Other</u> *https://engineering.purdue.edu/BME/Academics/Graduate/Tracks/7racks%20Header* 

<u>Was POS Discussed (Y/N, comments if any):</u> Comments/Suggestions (e.g., additional useful courses):

Strengths of Student:

Areas for Improvement/Growth:

Technical:

Professional Development:

Any Additional Suggestions for Training Plan/Networking:

Overall Outcome:

Pass

\_\_\_\_\_ Provisional Pass (issues in not more than one area):

\_\_\_\_\_ Written document revision required (within 3 weeks)

- \_\_\_\_\_ Oral Exam needs to be repeated (within 2 months, based on same document)
- \_\_\_\_\_ No Pass (both components must be repeated next semester (excluding summer)

\_\_\_\_\_ Fail (did not pass 2<sup>nd</sup> attempt)

Next Committee Meeting

\_\_\_\_\_ Within 12 months (required for all students)

\_\_\_\_\_ Within 6 months (if needed/helpful)

\_\_\_\_ Other

\*\*\*\*\*\* FINAL RUBRIC WILL BE FILLED OUT BY WHOLE COMMITTEE (<u>QUALTRICS</u>) IN LAST 10 MINS of MEETING \*\*\*\*\*\*\* https://purdue.ca1.qualtrics.com/jfe/form/SV\_1RnO1NihktcSyV0