**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 prior to the scheduled exam/mentoring meeting, if possible. The remainder of the form will be completed during the meeting]*

Student Name: Committee Member:

 Committee Chair:

Common Breadth of Biomedical Engineering Knowledge (*review student self-evaluation on Cover Sheet)*:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Appropriate | Needs Discussion | Comments (if needed) |
| 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 Expectations | Meets Expectations | Improvements Needed | Fails to Meet Minimal Expectations |
| **PROPOSAL** |
| 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:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* TO BE COMPLETED AT ORAL EXAM \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Has IDP been provided and discussed with committee (Y/N):

*Comments/Suggestions (if any):*

Career Path Options discussed: \_\_\_ Academic; \_\_\_ Industry; \_\_\_ Clinical; \_\_\_Global Health; \_\_\_ Other

[*https://engineering.purdue.edu/BME/Academics/Graduate/Tracks/Tracks%20Header*](https://engineering.purdue.edu/BME/Academics/Graduate/Tracks/Tracks%20Header)

Was POS Discussed (Y/N, comments if any):

*Comments/Suggestions (e.g., additional useful courses):*

Strengths of Student:

Areas for Improvement/Growth:

 *Technical:*

 *Professional Development:*

Any Additional Suggestions for Training Plan/Networking:

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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 2nd 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 ([QUALTRICS](https://purdue.ca1.qualtrics.com/jfe/form/SV_0vqfhaQES1jS1T0)) IN LAST 10 MINS of MEETING \*\*\*\*\*\*\*\*

[https://purdue.ca1.qualtrics.com/jfe/form/SV\_1RnO1NihktcSyV0](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpurdue.ca1.qualtrics.com%2Fjfe%2Fform%2FSV_1RnO1NihktcSyV0&data=05%7C02%7Csmmay%40purdue.edu%7Cd736188fc80947e7f01508dc27f552e0%7C4130bd397c53419cb1e58758d6d63f21%7C0%7C0%7C638429181808186644%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=9DUoyWC4vaNrM4hV3NXZO0BY7Hn03vbIRHmOTqEPUp8%3D&reserved=0)