**University of Pittsburgh**

**Department of Biological Sciences**

**Graduate Programs in EE and MCDB**

**Comprehensive Examination Report**

**Faculty form:** This form is to be completed by the faculty Chair of the Examination Committee in consultation with the other members of the

committee and will provide an evaluation of the written proposal and oral exam.

|  |  |
| --- | --- |
| Student’s Name |  |
| Graduate Program | [ ]  EE [ ]  MCDB [ ]  Other: |
| Dissertation Advisor |  | [ ]  Present |
| Dissertation Coadvisor (if any) |  | [ ]  Present |
| Committee Chair |  | [ ]  Present |
| Committee Member |  | [ ]  Present |
| Committee Member |  | [ ]  Present |
| Committee Member (if any) |  | [ ]  Present |
| Date of Examination |  |
| Is this a Reexamination? |  **[ ]**  No  **[ ]**  Yes, for exam taken on:  |

**Detailed evaluation form**

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|  |
| **Category** |  | **Outstanding** | **Above expectations** | **Meets expectations** | **Below expectations** | **Unsatisfactory** |
| Overall assessment | **[ ]** Outstanding[ ]  Above expectations[ ]  Meets expectations[ ]  Below expectations[ ]  Unsatisfactory | Clearly excels and stands out in every component of assessment.  | Excels in some components of assessment and stands out in a number. | Upward trajectory. All components are on par with the program expectations.  | Clearly identified deficits in some components. Will need to take significant steps to improve and meet program expectations.  | Major deficiencies in all or most components of the assessment.  |
| General knowledge of literature in the broad field | **[ ]** Outstanding[ ]  Above expectations[ ]  Meets expectations[ ]  Below expectations[ ]  Unsatisfactory | Clear command of the “big picture”. Understands the major burning questions in the field.  | Good command of the “big picture” and major questions in the field. | Usually can explain key concepts and answer relevant questions on general topics.  | Knows some key concepts and paradigms but has trouble placing them in the big picture.  | Major difficulties with understanding the broad field and answering basic questions.  |
| Knowledge of project and its context in current research | **[ ]** Outstanding[ ]  Above expectations[ ]  Meets expectations[ ]  Below expectations[ ]  Unsatisfactory | Understands the place of project in the broad field and discusses the impact and the next steps.  | Good command of the relevance of the project in the broad field. Usually discusses specifics pertaining to future directions.  | Can discuss relevance of project in the broad field. Is making progress toward discussing specific future directions.  | Trouble with discussing implications and potential future directions. | Major difficulties describing the impact of the project.  |
| Knowledge of the literature in the specific field.  | **[ ]** Outstanding[ ]  Above expectations[ ]  Meets expectations[ ]  Below expectations[ ]  Unsatisfactory | Comprehensive knowledge of research literature in the field.  | Detailed and up to date knowledge of research literature in the field.  | Generally up to date knowledge of research literature in the field. | Some deficits in the knowledge of the current literature.  | Major deficiencies in the knowledge of current literature. |
| Proficiency in designing experiments | **[ ]** Outstanding[ ]  Above expectations[ ]  Meets expectations[ ]  Below expectations[ ]  Unsatisfactory | Complete and comprehensive experimental design that incorporates all aspects of statistics, controls, pitfalls and alternative outcomes and approaches.  | Designed well-thought experiments, including appropriate controls and statistics. Well-developed pitfalls, alternative approaches and outcomes.  | Designed experiments with minor deficits. Good discussion of alternative approaches and outcomes. Recognizes the role of controls and understands experimental rigor. | Several pitfalls and missing controls. Some problems with the discussion of alternative outcomes and approaches. Some aspects of controls and statistics are missing.  | Pitfalls and missing controls. Significant problems with the discussion of alternative outcomes and approaches. Controls and statistics are missing. |
| Proficiency in data interpretation | **[ ]** Outstanding[ ]  Above expectations[ ]  Meets expectations[ ]  Below expectations[ ]  Unsatisfactory | Clearly and independently extrapolates the impact, interprets experiments with solid understanding of novelty, limitations and future directions. | Independently interprets most experiments with understanding of the pitfalls, limitations, and future directions. Confidently extrapolates the impact of the proposed studies and their conclusions. | Interprets some experiments independently but needs help with other aspects of interpretation. Understands and identifies most components of the impact from the proposed studies and their conclusions, with some deficits. | Finds interpreting experiments difficult and requires help.Major deficits understanding the impact from the proposed studies and their conclusions.  | Major deficits in every aspect of interpreting experimental results and understanding their impact.  |
| Quantitative skills | **[ ]** Outstanding[ ]  Above expectations[ ]  Meets expectations[ ]  Below expectations[ ]  Unsatisfactory | In command of all aspects of statistics and quantitatively rigorous design.  | Necessary aspects of statistics and quantitatively rigorous design have been accounted for. | Generally well-developed statistical approaches with some deficits.  | Understands some statistical approaches but significant deficits are apparent. | Poor understanding of statistical approaches in research.  |
| Quality of written report | **[ ]** Outstanding[ ]  Above expectations[ ]  Meets expectations[ ]  Below expectations[ ]  Unsatisfactory | Expert-level report incorporating all elements of the proposed research, approaches and impact.  | Comprehensive, well written and structured report incorporating nearly all elements of the proposed research, approaches, and impact.  | Generally well written report incorporating most elements of the proposed research, approaches and impact. A few deficits identified.  | The report incorporates some elements of the proposed research, approaches, and impact. Several deficits identified. | The report is poorly written and misses many elements of the proposed research, approaches, and impact.  |
| Quality of oral presentation and defense  | **[ ]** Outstanding[ ]  Above expectations[ ]  Meets expectations[ ]  Below expectations[ ]  Unsatisfactory | Confident and professional-level talk. Expertly answered questions and laid out major perspective.  | Confident and professional-level talk. Answered nearly all questions and laid out perspective.  | Mostly a clear, logical, and concise presentation, with some flaws. Answered the majority of questions well.  | Several problems with presentation; presentation lacked clarity. Problems answering questions.  | Did not develop, organize, and present the talk and did not answer questions.  |

**Committee Decision**

[ ]  Pass

[ ]  Conditional Pass (if not a reexamination)

[ ]  Fail

**Detailed evaluation**

Include specific examples of key components of this assessment.

Comments on the proficiency to design and interpret experiments

Comments on the written report

Comments on the oral defense

What can be improved moving forward:**Additional comments to student**

**Guidelines**

Within one week of the oral examination the Chair of the committee will complete a detailed Departmental report. This must be completed in consultation with the other members of the committee and will provide an evaluation of the written proposal and oral exam. If the student was not awarded an unconditional pass, the report will outline the areas that the student must improve or correct in order to pass the comprehensive exam. If the decision was a conditional pass, the specific requirements that need to be reexamined must be clearly documented in the report. If the decision was fail, then the specific reasons for this must be provided. The report must be e-mailed to the student, the other members of the committee, the DGS, the GPA and the Dissertation Advisor. The student is expected to discuss the report with members of the committee; this is essential if the student did not receive an unconditional pass.