**Physics Annual Committee Meeting Evaluation Rubric**

This form is intended to provide feedback to the student, the advisor, and the program on the required annual meeting of students with their faculty committees. Part II of this form should be completed by the committee chair in consultation with the rest of the committee and the advisor. The completed form should then be transmitted to the committee and the student, with a copy for the student’s permanent record.

**Part I**

Name of student: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Semester entered program: \_\_\_\_\_\_\_\_\_\_\_\_\_ Degree goal (Ph.D. or M.S.) \_\_\_\_\_\_\_\_\_\_\_\_

Committee members present (at least three members must be in attendance, either in person or remotely, including the advisor):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (chair)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(advisor)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date of meeting \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Has student advanced to candidacy for the Ph.D.? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part II** (to be completed by committee chair following meeting)

Summarize the progress the student has made toward the degree during the past year (course work, exams, research, publications, presentations). Note any specific or general areas of concern.

If the student has advanced to candidacy, summarize what the student needs to accomplish in order to have a defensible dissertation and give your best estimate of when that might occur.

Note any additional recommendations for this student’s professional development outside the standard program requirements. (Examples: additional coursework or self-study, training in specific skills, English language training for international students, writing instruction, symposia or short courses at conferences.)

Rate the student on the following (Excellent, Good, Fair, or Poor)

Knowledge about the research topic.

Progress toward degree completion.

Ability to communicate effectively in both written and oral form.

Ethical and responsible conduct.

**Physics Qualifying Exam Evaluation Rubric**

This form is intended to provide a common set of criteria for the assessment of presentations and oral exams for advancement to candidacy for the Ph.D. Each committee member must complete this form after the exam.

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This form is intended to provide a common set of criteria for the assessment of presentations and oral exams for advancement to candidacy for the Ph.D. Each committee member must complete this form after the exam.

Please rate each attribute on the following scale: 1 = Excellent, 2 = Good, 3 = Fair, 4 = Poor (failing)

|  |
| --- |
| **The student demonstrated the ability to:** |
| Critically read, understand, and evaluate the current literature in the relevant field. |  |
| Integrate ideas within the field and generate an original, significant, and feasible research question. |  |
| Demonstrate command of pertinent facts ranging from fundamenl principles to recent discoveries in the literature. |  |
| Demonstrate a comprehensive understanding of techniques critical to scholarship in the field. |  |
| Identify appropriate experimental and/or theoretical approaches to the chosen research problem |  |
| Generate and critically evaluate preliminary results. |  |
| Effectively communicate scientific concepts including the questions to be addressed, their significance, and the methods for obtaining and interpreting preliminary and anticipated future data. |  |

**Physics PhD defense rubric**

This form is intended to provide a common set of criteria for the assessment of Ph.D. dissertations and their defense. Each committee member should complete this form after reading the dissertation.

Please rate each element on the following scale: 1 = Excellent, 2 = Good, 3 = Fair, 4 = Poor (failing)

|  |  |  |
| --- | --- | --- |
| **Introduction** | Written Dissertation | Oral Defense |
| Identifies an original and meaningful research question. |  |  |
| Hypotheses or approaches presented are tightly aligned to the research question. |  |  |
| Provides a comprehensive, accurate literature review and places research work in proper context. |  |  |
| The literature review demonstrates the ability to synthesize literature and identify gaps in current knowledge. |  |  |
| The literature review demonstrates the ability to discriminate between the most important/informative papers and less important/informative ones. |  |  |
| The introduction is written in a manner accessible to both specialists and non- specialists in the field. |  |  |
| **Methods** |  |  |
| The methods selected are appropriate to the research question. |  |  |
| Novel methods are developed or previously described methods are refined and improved. |  |  |
| Methods are described in sufficient detail that others could reproduce experiments or computational methods. |  |  |
| Methodological challenges are recognized and workable solutions or alternative approaches are proposed. |  |  |
| **Results & Analysis** |  |  |
| The data obtained are adequate in quantity and nature to address the research question. |  |  |
| Data are thoughtfully and carefully analyzed in an objective manner. |  |  |
| Figures and tables present results in an easily interpretable fashion. |  |  |
| **Discussion/Conclusions** |  |  |
| Conclusions drawn are adequately supported by the data. |  |  |
| Discussion connects the results to issues in the literature and conveys the significance of the findings to the field of study. |  |  |
| Strengths and weaknesses in the work are discussed. |  |  |
| Practical and worthwhile future directions are identified. |  |  |
| **Mechanics** |  |  |
| Any errors in spelling or grammar are sufficiently minor that they do not affect comprehensibility. |  |  |
| Literature citations in the text and bibliography are accurate. |  |  |
| Organization and design of presentation slides, coupled with oral explanations, effectively and professionally communicates material to the audience. |  |  |
| **Professionalism** |  |  |
| Dissertation work is conducted and presented in a responsible and ethical manner. |  |  |
| Dissertation presents new knowledge that makes a meaningful contribution to the relevant field. |  |  |