**Instructions for Graduate Program Assessment and Student Feedback Form**

**Purpose:**

These forms are to document the committee discussion during the preliminary exam, comprehensive exam/proposal defense, or dissertation defense. The Committee should discuss the student's current state and evaluate whether the student is at the introductory, mid-program, or recently-completed MS/PhD level for each of the evaluative criteria, outlined on page 2.

* The **Program Feedback Form** is for the purpose of tracking students’ progress in the graduate program. Rankings for all students will be summarized each year for Outcomes Assessment of the Integrative Biology Graduate Program. The Program Feedback Form should not be given to the student.
* For the purpose of student advising, the exam chair will facilitate a discussion about individual student accomplishments and trajectory with the aim of crafting and providing feedback for the student on the **Student Feedback Form**. Feedback should communicate that the graduate program standards are high, provide encouragement that the student can meet those high standards, and provide specific, actionable feedback to help the student move toward their research and professional goals.

**Roles and Responsibilities:**

* The Chair and all committee members should familiarize themselves with the evaluation criteria on page 2.
* At the end of the committee discussion on the day of the exam, the Chair should facilitate a summary discussion to fill out both the Program Feedback Form and the Student Feedback Form. The form should be filled out before the end of the committee meeting unless there are extenuating circumstances.
* After the exam, the Chair should send both forms to the Graduate Program Coordinator.
* The Chair should send the Student Feedback Form (not the Program Feedback Form) to the student and advisor and suggest that they meet to discuss the feedback. The Chair should follow up to make sure that the student received the feedback and has no outstanding questions about it.

**Evaluation Criteria**

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| **Categories** | **Levels of Achievement** |
| **(a) At level typical for recently completed BA/BS** | **(b) At level typical for midway in MS** | **(c) At level typical for recently completed MS** | **d) At level typical for midway in PhD** | **(e) At level typical for recently completed PhD** |
| 1. **Specialized knowledge and skills within sub-discipline**
* development of hands-on skills
* integration of background research (concepts/methods)
* appreciation/application of foundational work
 | 1. can follow specialized discussion and from that identify gaps in knowledge and skills
2. developing proficiency in specific skillset, conversant with current state of subfield
3. independently proficient in use of specialized skill(s) in a professional context understands reasoning for methods and applicability of results
4. discuss limitations of theory and where their work fits in, compare and contrast methods and skills
5. have contributed original knowledge and/or skills/methods development to the field; identifies new knowledge gaps steps relevant to the field
 |
| 1. **Apply the process of science to original work**
* articulates logical argument for original work using conceptual models etc.
* uses hypothesis vetting (articulates and evaluates set of all possible outcomes)
* seeks critical feedback from peers and supervisors
* justifies the methods to address question/hypothesis
* develops, manages and curates publishable datasets (journal requirements)
* models and visualizes hypotheses with data
* interprets model results in light of uncertainties
 | * 1. at idea generation stage
	2. proposes reasonable methods and can defend/discuss their approach (methods choice and analytical framework). Can be narrowly focused.
	3. can interpret results including uncertainty and limitations; presents results using appropriate data, graphs, and tables
	4. generates original questions and proposes reasonable methods and can defend/discuss their approach; must be broadly applicable to theory
	5. can interpret results including uncertainty and limitations; presents results using appropriate data, graphs, and tables
 |
| 1. **Communicate and professional engagement**
* writes scientifically
* crafts and delivers a scientific presentation
* tailors communication to different/appropriate audiences (why care about this work)
 | * 1. can communicate ideas they generate and communicate knowledge/skill gaps
	2. can write and present targeted/narrowly focused research plan
	3. presents and defends results (written and verbal) to multiple audiences (e.g., professional conference, local government)
	4. can write and defend integrated research plan, describes potential contribution to the field
	5. presents and defends results (written and verbal) to multiple audiences (e.g., professional conference, local government)
 |
| 1. **Context of Science in Society, Recognition of Diversity**
* explains how academic disciplinary culture influence what is studied, how it is studied, and how results are interpreted and applied/used
* explains how societal/civic culture influence what is studied, how it is studied, and how results are interpreted and applied/used
 | * 1. can discuss applicability of field to society; willingness to engage in discussions around limitations of knowledge, application, and/or focus
	2. explains projects potential relevance to society; recognizes why proposed question(s) and method(s) were chosen
	3. identify appropriate outlets for the work; discuss implications of findings to society
	4. can discuss challenges in the field re: diversity and inclusion coming from disciplinary culture, social context, or other sources
	5. can discuss potential solutions/pathways towards addressing diversity challenges (broadly defined); can explain relevance of field and original work to society
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**PROGRAM FEEDBACK FORM**

**Department of Integrative Biology**

 **PhD Preliminary Exam MS Proposal Defense**

 **PhD Comprehensive Exam MS Thesis Defense
 PhD Dissertation Defense**

**Student Name Date**

**Academic Advisor Name Exam Chair Name**

Check only one box per row, reflecting committee consensus. Chair summarizes discussion, breaks ties, and completes form. ***Submit to the program coordinator, NOT to the student.***

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| --- | --- | --- | --- | --- | --- |
| **1. Specialized Content and Skills Knowledge within subdiscipline** | **At level typical for recently completed BA/BS** | **At level typical for midway in MS** | **At level typical for recently completed MS**  | **At level typical for midway in PhD** | **At level typical for recently completed PhD** |
| development of hands-on skills |  |  |  |  |  |
| integration of background research (concepts/methods) |  |  |  |  |  |
| appreciation/application of foundational work |  |  |  |  |  |
| OVERALL |  |  |  |  |  |

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| **2. Apply the process of science to original work** | **At level typical for recently completed BA/BS** | **At level typical for midway in MS** | **At level typical for recently completed MS**  | **At level typical for midway in PhD** | **At level typical for recently completed PhD** |
| articulates logical argument for original work using conceptual models etc. |  |  |  |  |  |
| uses hypothesis vetting (articulate and evaluate set of all possible outcomes) |  |  |  |  |  |
| seeks critical feedback from peers and supervisors |  |  |  |  |  |
| justifies the methods to address question/hypothesis |  |  |  |  |  |
| develops, manages and curates publishable datasets (journal requirements) |  |  |  |  |  |
| models and visualizes hypotheses with data |  |  |  |  |  |
| interprets model results in light of uncertainties |  |  |  |  |  |
| OVERALL |  |  |  |  |  |

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| **3. Communicate and professional engagement** | **At level typical for recently completed BA/BS** | **At level typical for midway in MS** | **At level typical for recently completed MS**  | **At level typical for midway in PhD** | **At level typical for recently completed PhD** |
| writes scientifically |  |  |  |  |  |
| crafts and delivers a scientific presentation |  |  |  |  |  |
| tailors communication to different/appropriate audiences (why care about this work) |  |  |  |  |  |
| OVERALL |  |  |  |  |  |

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| **4. Context of Science in Society, Recognition of Diversity** | **At level typical for recently completed BA/BS** | **At level typical for midway in MS** | **At level typical for recently completed MS**  | **At level typical for midway in PhD** | **At level typical for recently completed PhD** |
| explains how academic disciplinary culture influence what is studied, how it is studied, and how results are interpreted and applied/used |  |  |  |  |  |
| explains how societal/civic culture influence what is studied, how it is studied, and how results are interpreted and applied/used |  |  |  |  |  |
| OVERALL |  |  |  |  |  |

**STUDENT FEEDBACK FORM**

**Department of Integrative Biology**

**Student Name Date**

**Academic Advisor Name Exam Chair Name**

*This part of the form should include feedback intended for the student, not the program.*

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| --- | --- |
| Criteria | Overall Comments |
| **Specialized knowledge and skills within sub-discipline*** development of hands-on skills
* integration of background research (concepts/methods)
* appreciation/application of foundational work
 |  |
| **Apply the process of science to original work** * articulates logical argument for original work using conceptual models etc.
* uses hypothesis vetting (articulates and evaluates set of all possible outcomes)
* seeks critical feedback from peers and supervisors
* justifies the methods to address question/hypothesis
* develops, manages and curates publishable datasets (journal requirements)
* models and visualizes hypotheses with data
* interprets model results in light of uncertainties
 |  |
| **Communicate and professional engagement** * writes scientifically
* crafts and delivers a scientific presentation
* tailors communication to different/appropriate audiences (why care about this work)
 |  |
| **Context of Science in Society, Recognition of Diversity** * explains how academic disciplinary culture influence what is studied, how it is studied, and how results are interpreted and applied/used
* explains how societal/civic culture influence what is studied, how it is studied, and how results are interpreted and applied/used
 |  |