

## Masters in Biology/Environmental Science

### Assessment of Student Academic Achievement Objectives/BGES Graduate Program

This evaluation is to be completed by each member of the student's Advisory Committee, upon completion of the defense. Return form to the department secretary. Please check the appropriate box in each row, leaving blank anything that does not apply. Evaluation is with respect to discipline norms for the Masters level.

*Student's Name:* \_\_\_\_\_ *Occasion (Defense) Date:* \_\_\_\_\_ *Person completing evaluation:* \_\_\_\_\_

*Outcome voted by evaluator (circle one): Pass/Retry/Fail*

| Objectives/Criteria for Evaluation  | Level of Achievement   |   |   |
|---|--|---|---|
|   | Excellent  | Satisfactory  | Unsatisfactory  |
| The objectives are to develop in the student:   |  |   |   |
| 1. Essential knowledge and critical perspective pertaining to the major substantive area of biology that the student has selected |  |   |   |
| a. Depth of knowledge   | 9 Student shows excellent understanding of fundamental principles in the area; good working knowledge of literature: readily cites many relevant articles. | 9 Student displays good understanding of fundamentals; generally familiar with key literature.      | 9 Understanding of fundamental principles directly related to the area is weak; unfamiliar with important literature. |
| b. Breadth of knowledge   | 9 Student shows good understanding of related subjects.  | 9 Knowledge of related subjects is adequate.  | 9 Knowledge of related subjects is weak.  |
| c. Knowledge of standard methods  | 9 Student shows excellent understanding of experimental methods, their uses and limitations.   | 9 Knowledge of methods is adequate: familiar with standard methods and their application.           | 9 Knowledge of methods is weak, liable to lead to inappropriate usage and interpretations.                            |
| d. Critical perspective on literature   | 9 Excellent understanding; Can critique articles and explain their place in the field as a whole   | 9 Can cite key findings and some weaknesses of individual articles; can explain some relationships. | 9 Unable to critique literature and relate one finding to another.  |
| 2. Ability to execute original research of publishable quality  |  |   |   |
| a. Adequacy of the scope of the research  | 9 Work has examined several facets of the problem  | 9 Amount of work is adequate, perhaps limited to one aspect.  | 9 Amount of work done is inadequate.  |
| b. Adequacy of the depth of the research  | 9 Work has probed deeply the chosen problem; logically compelling  | 9 Work answers some basic questions of the problem.   | 9 Work only touched the surface of the problem.   |
| c. Logic of the research plan   | 9 Proceeds in an orderly logical fashion, considering all alternatives and controls.   | 9 Addresses major alternatives and controls.  | 9 Does not address major alternative explanations   |
| d. Novelty of the research  | 9 Research is an innovative idea from the student; student shows creativity in designing experiments and solving problems.                                 | 9 Student contributed originality to designing experiments and solving problems.                    | 9 The student followed directions from his/her advisor.   |

|   |   |   |   |
|---|---|---|---|
| <b>e. Skill in execution (Defense only)</b>   | <b>9</b> Routine and difficult techniques carried out well with skill.  | <b>9</b> Routine techniques applied well, providing clear results.  | <b>9</b> Shoddy experimental technique; data unconvincing.  |
| <b>f. Impact on advancement of the field (Defense only)</b>   | <b>9</b> Work has strong impact on the field.   | <b>9</b> Work has incremental impact on field.  | <b>9</b> Work has no impact on the field.   |
| 3. Effective communication in written and oral form.  |   |   |   |
| a. Quality of the writing style   | <b>9</b> Written sentences are complete and grammatical, stylistically pleasing. Words are chosen for their precise meaning.      | <b>9</b> Writing is grammatically correct. Paragraphs and sentences may not flow together perfectly.                  | <b>9</b> Writing contains many grammatical errors.  |
| b. Organization of the written thesis   | <b>9</b> Logically organized and easy to follow.  | <b>9</b> Organization is clear.   | <b>9</b> Poorly organized.  |
| c. Organization of the presentation   | <b>9</b> Presentation is clear, logical and organized. Listener can follow line of reasoning. Pacing is correct for the audience. | <b>9</b> Listener can follow and understand the presentation.   | <b>9</b> Presentation is poorly organized. Speaker jumps from topic to topic.                                 |
| d. Clarity of language usage  | <b>9</b> Comfortable delivery, easily audible and understandable by all.  | <b>9</b> Generally understandable. May have some grammatical errors, incomplete sentences, or imprecise formulations. | <b>9</b> Pronunciation, grammatical errors, or delivery make speaker difficult to understand or hear.         |
| e. Ability to answer questions  | <b>9</b> Answered questions directly, clearly and to the point.   | <b>9</b> Student can answer questions, but with some difficulty. May need some prompting.                             | <b>9</b> Difficulty understanding questions and/or unable to answer important questions, even with prompting. |
| f. Quality of visual presentation   | <b>9</b> Visual aids enhance the presentation and are prepared in a professional manner.  | <b>9</b> Visual aids are adequate for the presentation.   | <b>9</b> Visual aids are inadequate (writing too small, too much or too little information per slide).        |
| <b>4. Complete this section for MASTERS – ENVIRONMENTAL SCIENCE Degree Program ONLY: Familiarity with related areas of environmental science, including law, policy, and technology issues.</b> |   |   |   |
| <b>a. Familiarity with law and policy issues related to the work</b>  | <b>9</b> Student shows excellent understanding and ability to discuss implications.   | <b>9</b> Student displays some understanding and ability to discuss implications.                                     | <b>9</b> Student is unfamiliar with related areas; unable to speak to related aspects                         |
| <b>b. Familiarity with technology issues related to the work</b>  | <b>9</b> Student shows excellent understanding and ability to discuss implications.   | <b>9</b> Student displays some understanding and ability to discuss implications.                                     | <b>9</b> Student is unfamiliar with related areas; unable to speak to related aspects                         |

**To be answered by the research advisor only:**

Have any papers resulting from the dissertation work been accepted for publication in peer-reviewed journals? \_\_\_\_ Yes \_\_\_\_ No

If yes, how many? \_\_\_\_\_ (Please submit or have student submit a complete list.)