Washington State University

MAJOR CHANGE FORM – REQUIREMENTS

NOTE: If proposing a new program (degree) or extending, moving, consolidating, eliminating or renaming an existing program (degree), these proposals must first go through the Provost’s Office review process. Please do not use this form. Please contact the Provost’s Office for directions on processing program (degree) proposals.

SUBMITTING PROPOSAL – Follow the steps on form, then:
- Submit one electronic copy of complete packet of signed form/rationale statement/supporting documentation and/or edits to wsu.curriculum@wsu.edu.
- Send the original stapled packet PLUS 10 stapled copies of packet to the Registrar’s Office, campus mail code 1035.

Department Name: School of Biological Sciences

1. Check proposed changes:
   - [ ] New Plan (Major) in ________________________________ CIP# ____________
   - [ ] Change name of Plan (Major) from _______________ to _______________
   - [ ] Revise certification requirements for the Plan (Major) in ________________________________
   - [ ] Revise Plan (Major) requirements in Ph.D. Biology ________________________________
   - [ ] Drop Plan (Major) in ________________________________
   - [ ] New Sub-Plan (Option) in ________________________________ CIP# ____________
   - [ ] Change name of Sub-Plan (Option) from _______________ to _______________
   - [ ] Revise requirements for the Sub-Plan (Option) in ________________________________
   - [ ] Drop Sub-Plan (Option) in ________________________________
   - [ ] New Minor in ________________________________ CIP# ____________
   - [ ] Change name of Minor from _______________ to _______________
   - [ ] Revise Minor requirements in ________________________________
   - [ ] Drop Minor in ________________________________
   - [ ] New Certificate in ________________________________ CIP# ____________
   - [ ] Change name of Certificate from _______________ to _______________
   - [ ] Revise Certificate requirements in ________________________________
   - [ ] Drop Certificate in ________________________________
   - [ ] Other ________________________________

2. Effective Date: Fall 2016 (Effective date must be for future fall term.) Submission deadline is Oct 1st.
NOTE: Items received after deadlines may be put to the back of the line or forwarded to the following year. Please submit on time.

Contact: Justin Rupp
Email: ruppj@wsu.edu
Phone number: 335-9640
Campus mail code: 6414

3. PLEASE ATTACH A RATIONALE STATEMENT giving the reasons for each request marked above, and explaining how this impacts other units in Pullman and other campuses (if applicable).

4. PROVIDE SUPPORTING DOCUMENTATION AND/OR CURRENT CATALOG COPY with edit marks showing requested changes.

5. SIGN AND DATE APPROVALS.

Chair Signature/date: ___________________________  Dean Signature/date: ___________________________  CSC Date: ___________________________

AAC or GSC Date: ___________________________  Senate Date: ___________________________
Proposed Major Curricular Change to PhD Biology Degree

Faculty in the School of Biological Sciences voted strongly in favor of adding two requirements to the PhD in Biology degree program. I outline these requirements and their justification below.

**Historical context:** In 2011, SBS proposed, and had approved programmatic changes (see “Current Requirements” below) that streamlined our graduate program. Here, we propose two additional requirements are, in fact, quite minor and for the direct benefit of the students. In 2014 (effective August, 2015) we proposed, and had approved degree name changes for all of our graduate programs, and as such, the former “Zoology” PhD is now entitled “Biology.”

**Requirement #1: Attend departmental seminars.** Students will need to enroll in Biology 500 (an existing course entitled “Seminar”) for 1 credit each Fall and Spring semester they are enrolled. Course grade will be S/F and be based on attendance. Students will be required to attend a minimum of 10 SBS departmental seminars (out of ~15 each semester) and 2 additional seminars (outside of SBS) to achieve a passing grade. Students’ attendance will be tracked with a sign in sheet at the beginning of each seminar. PhD students can elect to take 1 semester “off” from the seminar requirement during their tenure at WSU. In addition, under certain circumstances (e.g., a substantial portion of a semester will be spent doing off-campus field work or training), then a student may submit a request to the Associate Director for Graduate Studies for an exemption for that particular semester.

**Justification:** Student attendance and participation in SBS departmental seminars has been waning in recent years, despite repeated pleas to attend seminar by faculty, student attendance has been strictly discipline focused. Not only are seminars of great benefit to students as a learning experience to be exposed to a diversity of information, but also as a training tool so students can learn to appreciate the factors that make distinguish good presentations from not as good presentations. In addition, when external speakers come and there is poor overall attendance, it is a reflection on our department.

**Requirement #2: Give a public proposal defense.** As part of their PhD program, students are currently required to give a proposal defense to their committee (Biology 501), which consists of two parts: a presentation and a subsequent exam. Faculty have expressed concern over the past several years that students are not given enough opportunities to present their research in a public format. Of course, practice giving presentations is key for graduate students to move on in their careers, such as giving job seminars after they graduate. As such, we propose that the presentation part of the proposal defense be public, followed by a closed exam that consists of the student’s committee only (which will occur within 1 week of the public exam). During the public proposal defense, a presentation rubric will be filled out by the attendees of the talk to give the student feedback on their presentation (see attached). The proposal defense is supposed to occur within one semester of a student’s oral qualifying exam. Oral qualifying exams are expected to be scheduled by the fourth semester for PhD students that enter SBS with a Master’s degree and in the sixth semester for students that enter SBS with a Bachelor’s degree. The public portion of the proposal defense, combined with the closed exam portion of the defense will be
considered in the student’s advisory committee as to whether they pass or fail the proposal defense in total. Satisfactory performance on the proposal defense will be determined by average scores on rubrics filled out by the student’s committee (Likert scale scores will be converted to numbers, and go from 1 (poor) to 5 (excellent); an average score across all categories of 3 or better will constitute a pass; see attached proposal defense rubric). In cases where a student fails their proposal defense (a F grade is assigned for the course), the student will have to complete and pass the proposal defense within one year of the original exam date to maintain candidacy in the PhD program.

**Justification:** There is a clear benefit for students to give as many presentations as possible in their time as a graduate student. This will allow the student to get broad feedback on their public presentation skills, as well as their proposed research in a semi-formal setting.

**Current Requirements** (new requirements since 2011 denoted with * and proposed new requirements in *italic*):

- Minimum of 21 total graded credits at the 400 or 500 level
- Minimum of 9 graded credits with BIOLOGY prefix
- 5 credits of “breadth” coursework requirement (including in the 21 graded credit min.; determined by student’s advisory committee)*
- Teaching training course (Biology 585; 2 credits)*
- Grant writing course (Biology 582; 2 credits)*
- 2 credits of special topics (Biology 589; included in the 21 graded credit minimum)
- 2 credits of proposal defense (Biology 501), including *Public proposal defense presentation
- Attend departmental seminars (register for Biology 500; each semester for S/F grade)
- Transfer credits follow graduate school requirements (up to 50% of graded credits)
EVALUATION RUBRIC: PROPOSAL DEFENSE

Candidate: 

Committee Member: 

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor (1)</th>
<th>Fair (2)</th>
<th>Competent (3)</th>
<th>Good (4)</th>
<th>Excellent (5)</th>
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<tbody>
<tr>
<td>Understands and interprets scientific literature relevant to research topic</td>
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<td>Able to place their research in a broader scientific and sociological/cultural context</td>
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<td>Demonstrates ability to formulate hypotheses and develop experimental design</td>
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<td>Discusses appropriate analyses for relevant data types</td>
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<td>Defends research methodology and interpretation and considers alternative interpretations</td>
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<td>Interprets and presents preliminary research results in oral and written formats</td>
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Comments:
**EVALUATION RUBRIC: GENERAL PRESENTATIONS**

<table>
<thead>
<tr>
<th>Presentation Style</th>
<th>Poor</th>
<th>Fair</th>
<th>Competent</th>
<th>Good</th>
<th>Excellent</th>
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<tbody>
<tr>
<td>Uses clear and intelligible language (avoids jargon)</td>
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<td>Makes appropriate eye contact with audience</td>
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<td>Engages audience</td>
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<td>Effectively use of slides/ visual aids</td>
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<td>Clear flow of overall presentation</td>
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<td>Projects voice</td>
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<tr>
<th>Content</th>
<th>Poor</th>
<th>Fair</th>
<th>Competent</th>
<th>Good</th>
<th>Excellent</th>
<th>N/A</th>
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<td>Identifies problem(s) of significant standing in biology</td>
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<td>Demonstrates an understanding of historical work (i.e. context) regarding the biological problem(s)</td>
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<td>Formulates cogent hypotheses and/or develops corresponding experiment(s)</td>
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<td>Clearly describes tests and results of conceptual ideas described</td>
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<td>Relates the specific research outcomes to broader scientific goals</td>
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<td>Defends research methodology/ interpretation(s) and considers alternative interpretation(s)</td>
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<td>Synthesizes research in a way that communicates general importance</td>
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Comments: