Required Courses for Graduate Students in the *Ecology and Evolutionary Biology* (EEB) Research Group
Faculty Affiliated with the EEB Research Group

- Dale A. Devitt
- Michelle M. Elekonich
- Allen G. Gibbs
- Brett R. Riddle
- Javier A. Rodríguez
- Stanley D. Smith
- Lloyd R. Stark
- Peter L. Starkweather
- Daniel B. Thompson
- Lawrence R. Walker

Adjunct Faculty: John T. Klicka

Affiliated Faculty: Jef R. Jaeger
EEB – Required Courses

• BIOL 701 – *Ethics in Scientific Research* (1 credit)

  Students must take this course during their first year in the Program.

• BIOL 793A – *Advanced Topics in Life Sciences (Ecology and Evolution)* (1-2 credits)

  Students must take this course at least once during their first two years in the Program.
EEB – Required Courses

• At least six (6) credits of seminar-style courses, either in BIOL 793A or BIOL 796A, or in any combination of the two.

• BIOL 793A – *Advanced Topics in Life Sciences (Ecology and Evolutionary Biology)* (1-2 credits)

• BIOL 796A – *Graduate Seminar (Ecology and Evolutionary Biology)* (1-2 credits)

• Students may take more than 6 credits, but no more than sixteen (16) credits can apply toward the degree.
EEB – Required Participation

• BIOL 790A – *Research Colloquium in Life Sciences* (1-2 credits)

• Starting in Fall 2010, all EEB students must attend the Colloquium every semester even if not enrolled for credit.

• Each student must also present his/her research in the Colloquium once per academic year.

• Students may register for Biol 790A each semester, but no more than ten (10) credits can apply toward the degree.
EEB – Elective Courses

- All EEB Master’s students who joined the Program in Fall 2008 or later must take at least three (3) didactic graduate courses.

- All EEB Doctoral students who joined the Program in Fall 2008 or later must take at least six (6) didactic graduate courses.

- These didactic graduate courses include, but are not limited to the following courses.
EEB – Elective Courses

• BIOL 611 – Molecular Evolution (3 credits)
• BIOL 618 – Microbial Ecology (3 credits)
• BIOL 626 – Plant Anatomy (3 credits)
• BIOL 632 – Herpetology (4 credits)
• BIOL 633 – Ornithology (4 credits)
• BIOL 634 – Mammalogy (4 credits)
• BIOL 641 – Field Ecology (3 credits)
EEB – Elective Courses (continued)

- BIOL 671 – *Aquatic Ecology* (3 credits)
- BIOL 644 – *Principles of Plant Ecology* (3 credits)
- BIOL 680 – *Introduction to Biological Modeling* (3 credits)
- BIOL 687 – *Principles of Systematics* (3 credits)
- BIOL 690 – *Biogeography* (3 credits)
EEB – Elective Courses (continued)

• BIOL 714 – *Population Genetics* (3 credits)

• BIOL 730A – *Special Lectures in Life Sciences (Ecology and Evolutionary Biology)* (3 credits)

• BIOL 743 – *Ecological Plant Physiology* (3 credits)

• BIOL 745 – *Arid Zone Soils* (3 credits)

• BIOL 748 – *Environmental Physiology* (3 credits)
EEB – Elective Courses (continued)

• BIOL 781 – *Population and Evolutionary Ecology* (3 credits)

• BIOL 783 – *Community and Ecosystem Ecology* (3 credits)

• BIOL 784 – *Conservation Biology* (3 credits)

• BIOL 786 – *Bioenergetics* (3 credits)
Students are strongly encouraged to take courses in diverse areas. For example:

- an ecophysioologist will benefit from learning concepts of ecology and conservation biology;
- an evolutionary biologist or systematist will profit by becoming familiar with ideas of community/ecosystem ecology and ecophysiology, and
- a community or ecosystem ecologist may want to branch out in one of two directions, evolutionary or ecophysiological.
The Advisory Committee may require the student to take certain specific courses, depending on the person’s academic background and research objectives.
EEB – Thesis/Dissertation Credits

• Master’s students must take six (6) credits of Biol 797 (*Thesis*) in order to graduate. Students may register for more than 6 credits of Biol 797, but only six (6) credits can be applied toward the MS degree.

• Doctoral students must take twelve (12) credits of Biol 799 (*Dissertation*) in order to graduate. Students may register for more than 12 credits, but no more than eighteen (18) can be applied toward the PhD degree.
Additional Graduate Courses

• Master’s students must complete 30 credits in the program, and Doctoral students must complete 60. In addition to the above required classes, students may also take the following:

• Biology 789 — *Independent Graduate Study in Life Sciences* (1-3 credits). This class can be used to receive research credit related to a student’s thesis or dissertation project prior to taking Biol 797 or Biol 799. Biol 789 can be repeated, but only nine (9) credits can be applied toward an MS or PhD degree.
Additional Graduate Courses (continued)

- Biology 791 – *Research Laboratory Discussions in Life Sciences* (1-2 credits). With the Advisor’s approval, a graduate student can enroll in this class to receive credit for presenting and participating during formal laboratory meetings with his/her Advisor’s research group. This course may be repeated, but only 10 credits can apply toward a MS or PhD degree.
## Sample Program of Study: EEB Master’s Student

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>3 or 4 600- or 700-level didactic courses</td>
<td>9-12</td>
</tr>
<tr>
<td>BIOL 701 – <em>Ethics in Scientific Research</em></td>
<td>1</td>
</tr>
<tr>
<td>BIOL 790A – <em>Research Colloquium</em></td>
<td>4</td>
</tr>
<tr>
<td>BIOL 791 – <em>Research Lab. Discussions</em></td>
<td>4</td>
</tr>
<tr>
<td>BIOL 793A – <em>Advanced Topics in Life Sciences</em></td>
<td>6</td>
</tr>
<tr>
<td>and/or BIOL 796A – <em>Graduate Seminar</em></td>
<td></td>
</tr>
<tr>
<td>BIOL 789 – <em>Independent Study</em> (“Pre-thesis”)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 797 – <em>Thesis</em></td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>≥30</strong></td>
</tr>
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Sample Program of Study:  
EEB Doctoral Student

- Six 600- or 700-level didactic classes  
  Credits: 18
- BIOL 701 – *Ethics in Scientific Research*  
  Credits: 1
- BIOL 790A – *Research Colloquium*  
  Credits: 8
- BIOL 791 – *Research Lab. Discussions*  
  Credits: 8
- BIOL 793A – *Advanced Topics in Life Sciences*  
  and/or BIOL 796A – *Graduate Seminar*  
  Credits: 8
- BIOL 789 – *Independent Study*  
  Credits: 6
- BIOL 799 – *Dissertation*  
  Credits: 12

Total ≥60