Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 520</td>
<td>Plant Physiology</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL 540</td>
<td>Mammalian Physiology</td>
<td></td>
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<tr>
<td>BIOL 547</td>
<td>Molecular Biology I</td>
<td>3</td>
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<tr>
<td>BIOL 570</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 597</td>
<td>Research in Biological Literature</td>
<td>1</td>
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</tbody>
</table>

Electives and Culminating Experience

Biology Areas of Emphasis

Select 16-19 credits from the following:

1. BIOL 500 Introductory Molecular Cell Biology
2. BIOL 510 Biology Pedagogy for Secondary Teachers
3. BIOL 512 Topics in Modern Genetics
4. BIOL 513 Instrumentation and Techniques for Biological Science
5. BIOL 514 Graduate Seminar in Biology
6. BIOL 518 Strategies for Teaching College Biology
7. BIOL 520 Plant Physiology
8. BIOL 521 Field Studies of Flowering Plants
9. BIOL 522 Plant Pathology
10. BIOL 529 Advanced Herpetology
11. BIOL 532 Advanced Entomology
12. BIOL 533 Advanced Cell Biology
13. BIOL 540 Mammalian Physiology
14. BIOL 542 Advanced Endocrinology
15. BIOL 543 Advances in Immunology
16. BIOL 544 Advanced Comparative Animal Physiology
17. BIOL 545 Experimental Endocrinology
18. BIOL 546 Topics in Physiology
19. BIOL 548 Molecular Biology II
20. BIOL 549 Topics in Developmental Biology
21. BIOL 550 Topics in Microbiology
22. BIOL 551 Intermediary Metabolism I
23. BIOL 552 Biology of Lipids
24. BIOL 554 Microbial Physiology
25. BIOL 555 Medical Genetics
26. BIOL 556 Molecular Biology of Proteins
27. BIOL 557 Virology
28. BIOL 558 Microbial Genetics
29. BIOL 560 Molecular Genetics
30. BIOL 565 Advanced Plant Molecular Genetics
31. BIOL 571 Physiological Plant Ecology
32. BIOL 574 Behavioral Ecology
33. BIOL 576 Biology of Extreme Habitats
34. BIOL 579 Physiological Ecology of Animals
35. BIOL 580 Evolutionary Mechanisms
36. BIOL 586 Selected Advanced Topics in Biology
37. BIOL 592 Graduate Colloquium

0-4 credits from the following may be used:

- BIMS 592 Bacteriological Techniques in Marine Sampling
- BIOL 572 Wetland Ecology
- BIOL 573 Shoreline Ecology

0-6 credits from the following may be taken with advisor approval:

- CHEM 530 Advanced Organic Chemistry
- CHEM 532 Organic Synthesis
- CHEM 570 Advanced Biochemistry
- EAES 502 The Dynamic Earth
- EAES 505 Environmental Geoscience
- EAES 526 Geochemistry
- EAES 545 Paleoecology
- EAES 550 Advanced Marine Geology

Thesis or Non-Thesis Option

Select one of the following:

4-6 credits

1. BIOL 698 Master’s Thesis
2. BIOL 599 Introduction to Biological Research
3. GRAD CMP Comprehensive Examination

In the term that you will sit for exam, register for the section which matches your major & advisor. Successfully pass exam.

Total Credits 32

1. BIOL 514 is recommended.
2. Or Biology/Lab Field course approved by Graduate Program Coordinator.