2010 Curriculum Biology BS Degree Checklist (updated 8/22/17)

Please print your name:  
Email address:  

Please attach the following:
1. An unofficial transcript following registration for your last semester.
2. Copies of transcripts from other schools for science transfer credits.
3. For graduation, please bring this completed checklist & BS petition form to the Bio Department Office

I. Introductory and Core Courses = 16 credits

<table>
<thead>
<tr>
<th>Introductory Course</th>
<th>Semester &amp; Year Completed</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio 121</td>
<td>Fall</td>
<td></td>
</tr>
</tbody>
</table>

Core Courses

| Bio 326             | Spring                    |       |
| Bio 327             | Fall                      |       |
| Bio 345             | Fall                      |       |
| Bio 305             | Spring                    |       |

II. Upper Division Requirement = 22 credits

Students should select additional upper-division courses (numbered 300 or above) to complete at least 22 credits. These credits should include six credits of laboratory courses and a communications skills course. Some lab courses also fulfill the communications skills requirement. Finally, the 22 credits of upper division coursework must satisfy a distribution requirement such that a minimum of 3 credit hours is taken from each area (Cell & Molecular Biology-CM and Ecology & Evolutionary Biology-EE) of the upper division biology course lists (see reverse). Courses may satisfy more than one requirement, but credits count only once.

<table>
<thead>
<tr>
<th>Laboratory Requirements</th>
<th>Semester &amp; Year Completed</th>
<th>Grade</th>
<th># Credits*</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 credit Lab: Bio</td>
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<td></td>
<td></td>
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<tr>
<td>3 credit Lab: Bio</td>
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</tbody>
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Elective Courses

| a) Communication skills | Bio                        |       |            |
| b) Distribution requirement | (CM) Bio | (EE) Bio | |
| c) Other elective courses | Bio                        |       |            |

Sum of Credits:

III. GPA Requirement

A 2.0 GPA requirement is required for all upper-division (300 level and higher) courses in the major.

IV. Chemistry and Math Requirements = 19-21 Credits

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester &amp; Year Completed</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem 106/107</td>
<td></td>
<td></td>
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<tr>
<td>Chem 116/117</td>
<td></td>
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<tr>
<td>Chem 275/276</td>
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<tr>
<td>Either Math 285/286</td>
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<tr>
<td>Or Math 295/296</td>
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</tr>
<tr>
<td>Or Math 295/APM 391 (ESF)</td>
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</tbody>
</table>
Upper Division Biology Courses – Distribution Requirement for the B.S. degree
At least 3 of the 22 Upper Division Credits must be from each list. L- denotes a laboratory course (# of credits counted as lab in parentheses). Underlined courses fulfill the Communication Skills Requirements.

### Cell and Molecular Biology

- 300 – Dance, Exercise and Brain Function
- 300 – Research Methods for Life Scientists
- 316/317 L (3) - Anatomy and Phys. I&II*
- 355 - General Physiology
- 396/REL 359 – Stem Cells & Society
- 400 – Brain and Behavioral Plasticity
- 400 - Experimental Designs & Interpretations in Biol
- 400 – Food for Thought: Brain Bioenergetics
- 400 - Neurochemistry of Memory
- 400 – Nervous System Insult
- 400 – Seminar in Neurodegenerative Disease
- 400 – Principles of Toxicology
- 400 – Quantitative Methods for Life Scientists
- 400 – Rhythms of the Brain
- 400 – Sem: Epigenetics of Human Health & Disease
- 400 – Seminar in Cell Biology & the Cytoskeleton
- 407 – Advanced Neuroscience
- 409 L (1) – General Microbiology**
- 414 – Biology of Adaptive Behaviors (Bio 400)
- 416 – Biology of Aging (Bio 400)
- 421 – Capstone Seminar in Biotechnology
- 422 L – (3) Bioinformatics for Life Scientists
- 425 L – (3) Cell and Developmental Biol. Lab
- 435 L – (3) Genetics lab
- 437 – Seminar in Develop. Neuro. (Bio 400)
- 441 – Seminar in Infectious Diseases (Bio 300)
- 442 – Seminar in Model Organism Genetics (Bio 400)
- 443 – Seminar in Epigenetics (Bio 400)
- 444 – Seminar in Neurotoxicology (Bio 400)
- 447 – Basic Immunology
- 457 – Principles of Human Toxicology (Bio 400)
- 459 – Plants & People (Bio 300)
- 462 – Molecular Genetics
- 463 L – (3) Molecular Biotechnology*
- 464 L – (3) Applied Biotechnology*
- 465 L – (3) Molecular Biology Lab
- 469 – Countering Weapons Mass of Destruction
- 472 L – (3) Advanced Light Microscopy (Bio 400)
- 475 L – (4) Biochemistry lab

### Ecology and Evolutionary Biology

- 310 – Evolution, Religion and Society
- 312/313 – Marine Ecology of Spain
- 400 – Biology of Marine Mammals
- 400 – Biomimicry
- 400 – Comparing Sperm and Pollen Evolution
- 400 L – (3) Ecosystem Ecology Laboratory
- 400 - Evolutionary Genetics of Complex Traits
- 400 – Global Change Biology
- 400 – Isotopic Approaches in Global Change Eco
- 400 – Quantitative Methods for Life Scientists
- 400 – Seminar in Molecular Ecology
- 400 – Seminar in Disturbance Ecology
- 400 – Seminar in Ecosystem Science
- 400 – Sexual Selection
- 400 – Sexual Selection and Mating Strategies
- 400 – Species Interactions and Biodiversity
- 400 – Topics in Evolution
- 405 L – (4) Introduction to Field Biology (lab)
- 411 – Evolutionary Mechanisms (Bio 400)
- 415 – Conservation Biology
- 417 L- (3) Animal Behavior & Evolutionary Bio Lab
- 428 – Capstone Seminar - Environmental Science
- 431- Population Genetics
- 432 L – (3) Global Change Ecology Laboratory
- 439 – Seminar in Ecosystem Ecology (Bio 400)
- 448 – Evolutionary Medicine
- 450 – Seminar in Evolutionary Genetics (Bio 400)
- 451 – Ecology
- 453 L – (2) Ecology lab***
- 456 – Seminar in Human Disease Genomics (Bio 400)
- 458 – Seminar in Animal Communication (Bio 400)

*The combinations of Bio 316/317 or Bio 463/464 alone cannot be used to fulfill the 6-credit lab requirement for the BS degree. Students may take these labs, but must complete one additional 2-4 credit lab course to satisfy the laboratory requirement.
** Because Bio 409 is a 1-credit lab experience, it cannot be used to satisfy the lab requirement for the BS degree in Biology.
***By petition this course can count as one of the two labs needed for the laboratory requirement for the BS degree.
****Bio 419 (Jr/Sr Thesis Seminar) plus Bio 495 (Distinction Thesis) or Bio 499 (Honors Thesis) can fulfill the comm skills req.

When using this as your final degree checklist for graduation, please attach the following:

1. An unofficial transcript following registration for your last semester.
2. Copies of transcripts from other schools for science transfer credits.
3. The BS petition itself, signed by your academic advisor.
4. For graduation, please return to Deborah in the Biology Undergraduate Office, Room 114 LSC