2010 Curriculum Biology BS Degree Checklist

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

<table>
<thead>
<tr>
<th>Core Course</th>
<th>Semester &amp; Year Completed</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio 326</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>Bio 327</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>Bio 345</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>Bio 305</td>
<td>Spring</td>
<td></td>
</tr>
</tbody>
</table>

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 of coursework is taken from each area (Cell & Molecular Biology and Ecology & Evolutionary Biology) 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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 credit Lab: Bio</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Elective Courses

a) Communication skills

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

b) Distribution requirement

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

c) Other elective courses

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

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>
</tr>
<tr>
<td>Chem 116/117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chem 275/276</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Either Math 285/286

Or Math 295/296

Or Math 295/APM 391 (ESF)
Upper Division Biology Courses – Distribution Requirement for the B.S. degree

Courses in the following two lists will count toward the distribution requirement to take at least 3 of the 22 Upper Division Course Credits from each area of the biological sciences. L- denotes a laboratory course or lecture course providing at least one credit of laboratory. The number of credit hours of lab counted toward the degree is listed after the L in parentheses.

**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
- 400 – Brain and Behavioral Plasticity
- 400 - Experimental Designs & Interpretations in Biol
- 400 – Food for Thought: Brain Bioenergetics
- 400 - Neurochemistry of Memory
- 400 - Neurodegenerative Diseases
- 400 – Principles of Toxicology
- 400 – Rhythms of the Brain
- 407 – Advanced Neuroscience
- 409 L (1) – General Microbiology**
- 414 – Biology of Adaptive Behaviors (Bio 400)
- 416 – Biology of Aging (Bio 400)
- 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
- 472 L – (3) Advanced Light Microscopy (Bio 400)
- 475 L – (4) Biochemistry lab
- 496 – Neuroscience and Society (Bio 400)
- 501 – Biology of Cancer
- 503 – Developmental Biology
- 505 – Cell Physiology
- BCM 475 – Biochem I
- BCM 476 – Biochem II
- BIO 575/576- Biochem I & II (previous numbers)

**Ecology and Evolutionary Biology**
- 310 – Evolution, Religion and Society
- 312/313 – Marine Ecology of Spain
- 400 – Biomimicry
- 400 – Comparing Sperm and Pollen Evolution
- 400 - Evolutionary Genetics of Complex Traits
- 400 – Global Change Biology
- 400 L – (3) Global Change Ecology Laboratory
- 400 – Molecular Ecology
- 400 – Seminar in Disturbance Ecology
- 400 – Sexual Selection
- 400 – Sexual Selection and Mating Strategies
- 400 – Species Interactions and Biodiversity
- 400 – Topics in Evolution
- 405 L – (3) Introduction to Field Biology (lab)
- 411 – Evolutionary Mechanisms (Bio 400)
- 415 – Conservation Biology
- 417 L- (3) Animal Behavior & Evolutionary Bio Lab
- 431 – Population Genetics
- 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 Animal Communication (Bio 400)
- 458 – Seminar in Human Disease Genomics (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 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 BA degree in Biology.

***By petition to the Biology Department this course can count as one of the two labs needed for the laboratory requirement for the BS degree.

Additional courses that may fulfill one of the above distribution areas by petition

The following courses have variable content and/or may have different focus depending on the instructor. Students intending to use one of these courses to fulfill the Distribution Requirement for Upper Division Biology Courses should inquire in the Biology Department Office as to how a given course could count before taking the course and petitioning.


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 this completed checklist along with the unofficial transcript(s) & BS petition form to Deborah in the Biology Undergraduate Office, Room 114, Life Sciences Complex.