Biology and Society 2008-2009

The requirements listed below pertain to all students matriculating in August 2008 and January 2009.

<table>
<thead>
<tr>
<th>Credits</th>
<th>II. Requirements in the Major</th>
<th>65-82</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Distribution Requirements</td>
<td>39-45</td>
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<tr>
<td><strong>A. Natural Sciences:</strong></td>
<td>8</td>
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<tr>
<td>BIOG 1101 – 1104 Biological Sciences Lectures and Labs OR</td>
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<tr>
<td>BIOG 1105 – 1106 Introductory Biology OR</td>
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<td>BIOG 1107 – 1108 General Biology</td>
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<td><strong>B. Social Sciences</strong></td>
<td>6</td>
<td></td>
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<td><strong>C. Humanities</strong></td>
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<tr>
<td>No language credit in this area. (See: I.F.)</td>
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<tr>
<td>B&amp;SOC 2051 Ethical Issues in Health and Medicine OR</td>
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<td>B&amp;SOC 2061 Ethics and Environment</td>
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<td><strong>D. Written Communications</strong></td>
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<td>Must be First-Year Writing Seminars.</td>
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<tr>
<td><strong>E. Quantitative and Analytical</strong></td>
<td>7-8</td>
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<tr>
<td>a. Either Statistics or Calculus must be taken at Cornell unless you have earned a score of 3 or higher on AP Calculus BC.</td>
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<td>b. Once the above requirement is met other AP credit from Calculus AB (a score of 3 or higher) or Statistics (a score of 4 or 5) may be applied to the Quantitative and Analytical requirement if the content is not overlapping.</td>
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<tr>
<td>1. Calculus:</td>
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<td>Choose one of the following:</td>
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<td>MATH 1106, MATH 1110, MATH 1120 OR</td>
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<td>Any higher-level calculus course</td>
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<td>2. Statistics:</td>
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<td>Choose one of the following:</td>
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<tr>
<td>AEM 2100, BTRY 3010, ILRST 2100, ILRST 2120, MATH 1710, PAM 2100, PSYCH 3500</td>
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<td><strong>F. Additional requirements</strong></td>
<td>8-13</td>
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<tr>
<td>• Courses from any natural science, social science, humanities, or mathematics courses can be counted here for remaining credits.</td>
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</tbody>
</table>

II. A. Biology Foundation Breadth | 9 |
Three courses from three of the following areas: |
- Ecology |
  - BIOE 2610 Ecology and Environment |
- Evolutionary Biology |
  - BIOE 2780 Evolutionary Biology |
- Biochemistry, Molecular, and Cell Biology |
  - BIOBM 3300 Principles of Biochemistry: Individual Instruction |
  - BIOBM 3310 Principles of Biochemistry: Proteins and Metabolism |
  - NS 3200 Introduction to Human Biochemistry |
  - BIOBM 3330 Principles of Biochemistry, Lectures |
- Genetics and Development |
  - BIOGD 2810 Genetics |
  - BIOGD 2820 Human Genetics |
  - PLBR 2250 Plant Genetics |
- Animal Behavior |
  - BIONB 2210 Neurobiology and Behavior I: Intro to Behavior |
- Neurobiology and Behavior |
  - BIONB 2220 Neurobiology and Behavior II: Intro to Neurobiology |
- Nutrition |
  - NS 1150 Nutrition, Health & Society |
- Biological Diversity |
  - BIOL 2410 Introductory Botany |
  - BIOMI 2900 General Microbiology Lectures |
  - BIOEE 2740 The Vertebrates |
  - BIOEE 3730 Biology of Marine Invertebrates |
  - BIOEE 4500 Mammalogy, Lectures |
  - BIOEE 4700 Herpetology, Lectures |
  - BIOEE 4701 Herpetology, Laboratory |
  - BIOEE 4750 Ornithology |
  - BIOEE 4760 Biology of Fishes |
  - ENTOM 2120 Insect Biology |
  - PLPA 3010 Plant Disease Management |
  - PLPA 3090 Fungi |
- Physiology and Anatomy |
  - BIOAP 3110 Introduction to Animal Physiology |
  - NS 3410 Human Anatomy and Physiology |
II. B. Biology Foundation Depth

One biology course for which one of the biology courses in II.A. is a prerequisite.

II. C. Core Course

Should be completed by end of junior year.

B&SOC 3011 Life Sciences & Society OR
PHIL 2860 Science and Human Nature

II.D. Theme

Five courses related to a theme selected by the student; must be above 1000 level, at least 3 credit hours, and taken for a letter grade.

Two courses from: Natural sciences issues and/or Biology elective (course with significant biology content)

Two courses from: Humanities/Social Sciences electives

One course taken senior year: Senior Seminar; courses change yearly

II. E. Social Sciences/Humanities Foundation

One course from each of two areas:

History of Biology/History of Science
Philosophy of Science
Politics of Science
Sociology of Science
Science Communication

III. Electives

Variable

IV. Physical Education

2

Physical education does not count toward college and university minimum credit requirements for full-time status.

Total Credits (exclusive of PE) 120

Pass/Fail Courses [S/U]

- S/U grading option may NOT be used for any required course [i.e., distribution requirements in Category I or major courses in Category II] unless it is the only grade option offered for those courses.
- S/Us MAY be used for electives in Category III.
- Students may apply no more than 12 credits of S/U towards graduation requirements. If a required course is only offered S/U, it will not count towards this limit. Students may take more S/Us if they choose, but the additional credit will not be applied towards graduation.
- The deadline for changing grade options is 3 weeks after the start of classes, the same as the "add" deadline.

Special Study Courses [4000, 4010, 4020, 4030]

- A total of 12 credits of special study course work from Human Ecology or other colleges will count towards the 120 graduation credit requirement. [Additional credits can be taken but will not be applied.]
- A maximum of three credits of 4000-4020 (not including 4030) may count towards the "credit outside the major" category as long as the special study is in a department outside the student’s major.
- Students cannot TA (4030) the same course for credit more than once or take and TA the same course simultaneously. 4030 does not fulfill any requirements towards the major. Registration for 4030 may not exceed 5 credit hours per semester.

- Students must complete 120 credits overall, exclusive of physical education and "00" courses.
- Elective credits can be earned in Human Ecology or elsewhere.

Pre-Med Students only:

(Not required for graduating from Human Ecology with a Biology & Society Major).

Additional Credits 24-28

- Chemistry…
  CHEM 2070 – 2080 General Chemistry AND 8
- One of the following sequences:
  CHEM 3570 – 3580 Organic Chemistry Lecture & 2510 Lab 8
  CHEM 3590 – 3600 Lecture and 3010 Lab 12
- and Physics
  PHYS 1101 – 1102 General Physics OR 8
  PHYS 2207 – 2208 Fundamentals of Physics 8

College Requirements:

- Students are NOT required to complete 9 credits in Human Ecology departments outside the major.
- Students must complete a minimum of 43 HUMEC credits.