

Biology and Society

2007-2008

The requirements listed below pertain to all students matriculating in August 2007 and January 2008.

	Credits
I. Distribution Requirements	28-40
A. Natural Sciences:	8
BIOG 101 – 104 Biological Sciences Lectures and Labs OR BIOG 105 – 106 Introductory Biology OR BIOG 107 – 108 General Biology	
B. Social Sciences	6
C. Humanities	4
No language credit in this area. (See: I.F.) B&SOC 205 Ethical Issues in Health and Medicine OR B&SOC 206 Ethics and Environment	
D. Written Communications	6
Must be First-Year Writing Seminars. MUST BE COMPLETED DURING FIRST 2 SEMESTERS	
E. Quantitative and Analytical	3-8
1. Math competency equivalent to BTRY 115 (precalculus) or MATH 100: a. AP of 3 or higher on AB test OR b. AP or 3 or higher on BC test OR c. Pass a math course equivalent to or higher than BTRY 115/MATH 100 AND Take one of the following: MATH 106 Calculus for Biologists MATH 111 Calculus MATH 112 Calculus OR Any higher-level calculus course	
2. Statistics, advanced math, logic One of the following statistics courses: AEM 210 Introductory Statistics BTRY 301 Biological Statistics I ECON 319 Introduction to Statistics and Probability ILRST 210 Introductory Statistics ILRST 212 Statistical Reasoning MATH 171 Statistical Theory and Application in the Real World PAM 210 Introduction to Statistics* <i>(*does not count toward 40 minimum Human Ecology credit requirement)</i> PSYCH 350 Statistics and Research Design SOC 301 Evaluating Statistical Evidence	
F. Additional requirements	8-13
• Courses from any natural science, social science, humanities, or mathematics courses can be counted here for remaining credits.	

	Credits
II. Requirements in the Major	43-56
II. A. Biology Foundation Breadth	9
Three courses from three of the following areas:	
Ecology	4
BIOEE 261 Ecology and Environment	
Evolutionary Biology	3-4
BIOEE 278 Evolutionary Biology	
Biochemistry, Molecular, and Cell Biology	4-5
BIOBM 330 Principles of Biochemistry: Individual Instruction BIOBM 331 Principles of Biochemistry: Proteins and Metabolism NS 320 Introduction to Human Biochemistry BIOBM 333 Principles of Biochemistry, Lectures	
Genetics and Development	3-5
BIOGD 281 Genetics BIOGD 282 Human Genetics PLBR 225 Plant Genetics	
Animal Behavior	3-4
BIONB 221 Neurobiology and Behavior I: Intro to Behavior	
Neurobiology and Behavior	3
BIONB 222 Neurobiology and Behavior II: Intro to Neurobiology	
Nutrition	3
NS 115 Nutrition, Health & Society	
Biological Diversity	2-5
BIOPL 241 Introductory Botany BIOMI 290 General Microbiology Lectures BIOEE 274 The Vertebrates BIOEE 373 Biology of Marine Invertebrates BIOEE 450 Mammalogy, Lectures BIOEE 470 Herpetology, Lectures BIOEE 472 Herpetology, Laboratory BIOEE 475 Ornithology BIOEE 476 Biology of Fishes ENTOM 212 Insect Biology PLPA 301 Plant Disease Management PLPA 309 Fungi	
Physiology and Anatomy	3-4
BIOAP 311 Introduction to Animal Physiology NS 341 Human Anatomy and Physiology	

Credits

II. B. Biology Foundation Depth

3 – 4

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

II. C. Core Course

4

Should be completed by end of junior year.

B&SOC 301 Life Sciences & Society **OR**
PHIL 286 Science and Human Nature

II.D. Theme

15 – 20

Five courses related to a theme selected by the student; must be above 100 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

6 – 8

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

College Requirements:

- Students are **NOT** required to complete 9 credits in Human Ecology departments outside the major.
- Students must complete a minimum of 40 HUMEC credits. PAM 210 cannot count toward this requirement.

• 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 [400, 401, 402, 403]

- 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 400-402 (not including 403) 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 (403) the same course for credit more than once or take and TA the same course simultaneously. 403 does not fulfill any requirements towards the major. Registration for 403 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 207 – 208 General Chemistry **AND**

8

One of the following sequences:

CHEM 357 – 358 Organic Chemistry Lecture & 251 Lab

8

CHEM 359 – 360 Lecture and 301 Lab

12

...and Physics

PHYS 101 – 102 General Physics **OR**

8

PHYS 207 – 208 Fundamentals of Physics

8