

# Genetics Undergraduate Program – Catalog 2015-2016

Degree: BS, Genetics, College of Agriculture & Life Sciences

## I. University Requirements (13 credits)

- \_\_\_ ENGL 150 (3) & ENGL 250 (3)
- \_\_\_ LIB 160 (1)
- \_\_\_ Three credits International Perspectives\*
- \_\_\_ Three credits US Diversity\*

\* These may dual count for college requirements

## II. AGLS College Requirements

- \_\_\_ SP COM 212 (3) or AGEDS 311 (3)
- \_\_\_ Three credits in Humanities
- \_\_\_ Three credits in Social Sciences
- \_\_\_ Three credits in Ethics
- \_\_\_ BIOL 312 (4) *fall or summer only*

## III. Advanced English Writing

- \_\_\_ One of ENGL 302 – 316 (3) or JLMC 347 (3)

## IV. Mathematical Sciences (11-12 credits)

- \_\_\_ STAT 101(4) or STAT 104 (3)
- \_\_\_ MATH 160 (4), MATH 165 (4), or MATH 181 (4)
- \_\_\_ *one of* STAT 301 (4), STAT 401 (4), MATH 166 (4) or MATH 182 (4)

## V. Physical and Chemical Sciences

### General Chemistry (9 credits)

- \_\_\_ CHEM 177 (4) & CHEM 177L (1)
- \_\_\_ CHEM 178 (3) & CHEM 178L (1)

### Organic Chemistry (8 credits)

- \_\_\_ CHEM 331 (3) & CHEM 331L (1)
- \_\_\_ CHEM 332 (3) & CHEM 332L (1)

### Biochemistry (6 - 7 credits)

- \_\_\_ BBMB 404 (3) or BBMB 420 (3)
- \_\_\_ BBMB 405 (3) (not with 420) or BBMB 411 (3) or CHEM 211 & 211L (4) or CHEM 325 (3)

### Physics (10 credits)

- \_\_\_ PHYS 111 (5) or PHYS 221 (5)
- \_\_\_ PHYS 112 (5) or PHYS 222 (5)

## VI. Biological Sciences Core (19 credits, min C-)

- \_\_\_ GEN 110 (1) *fall only*
- \_\_\_ BIOL 211(3) & BIOL 211L (1)
- \_\_\_ BIOL 212 (3) & BIOL 212L (1)
- \_\_\_ GEN/BIOL 313 (3) & GEN/BIOL 313L (1)
- \_\_\_ BIOL 314 (3)
- \_\_\_ BIOL 315 (3)

## VII. Genetics Core & Advanced Science Electives (19 credits, min C-)

- \_\_\_ GEN 409 (3) *fall only*
- \_\_\_ GEN 410 (3) *spring only*
- \_\_\_ GEN 462 (3) *fall only* or EEOB 563 (3) *spring*
- \_\_\_ GEN 491 (1)
- \_\_\_ MICRO 302 (3)

### Advanced Science Electives (6 credits total)

*These cannot be used elsewhere in the major*

- \_\_\_ One of AGRON/HORT 421 or ANS 352
- \_\_\_ ANS 331, 332, 333, 345
- \_\_\_ ANTHR 307, 319, 424
- \_\_\_ BBMB numbered 400 or above
- \_\_\_ BIOL numbered 300 or above, except 307, 355, 356, 366, 393A, 393B, 491, 495, 498
- \_\_\_ CHEM 211 & 211L, CHEM numbered 300 or above
- \_\_\_ EEOB 562, 563, 566, 567
- \_\_\_ GEN 340 (3), 444 (3), 490/499 (1-6 cr)
- \_\_\_ GDCB except 508, 511
- \_\_\_ MICRO numbered 300 or above
- \_\_\_ PHYS 461
- \_\_\_ PSYCH 310
- \_\_\_ STAT 301, 401, 402, 403

## VIII. Electives (Additional Courses to obtain 120 credits) 4 – 12 credits

*The number of elective credits varies depending on course selections including courses that dual count.*

*This is an unofficial checklist for the Genetics Major developed to assist in planning your courses. Your degree audit remains the official record of the requirements. For additional information see your Academic Advisor.*

*Prepared by Lois Girton, Genetics Advising Coordinator, [lgirton@iastate.edu](mailto:lgirton@iastate.edu); 294-1606. May 2015*