

Genetics & Agronomy (Plant Breeding & Biotechnology option) –

Catalog 2014-2015 Degree: BS, Genetics & Agronomy College of Agriculture & Life Sciences

I. Communications (13 credits)

- ___ ENGL 150 (3) & ENGL 250 (3)
- ___ SP COM 212 (3) or AGEDS 311 (3)
- ___ One of ENGL 302, 309 or 314 (3)
- ___ LIB 160 (1)

II. Mathematical Sciences (15-16 credits)

- ___ STAT 101(4) or STAT 104 (3)
- ___ MATH 165 (4) or MATH 181 (4)
- ___ MATH 166 (4) or MATH 182 (4)
- ___ STAT 301 (4) or 401 (4)

III. Physical and Chemical Sciences (33-34 credits)

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)

IV. Personal Development, Human Relations, and Global Awareness (12-15 credits)

College Requirements:

- ___ Three credits in Humanities
- ___ ECON 101 (3)
- ___ Three credits in Ethics, e.g. AGRON 342

University Requirements:

- ___ Three credits International Perspectives*
- ___ Three credits US Diversity*

* These may dual count for college requirements

V. Biological Sciences Core (18.5 -19 credits)

- ___ GEN 110 (1) *fall only* or AGRON 110 (0.5)
- ___ 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)

VI. Genetics Core (13 credits)

- ___ GEN 409 (3) *fall only*
- ___ GEN 410 (3) *spring only*
- ___ GEN 462 (3) *fall* or EEOB 563 (3) *spring*
- ___ GEN 491 (1) OR AGRON 410 (1)
- ___ MICRO 302 (3)

VII. Agronomy Core (21.5 -23 credits)

- ___ AGRON 105 (R)
- ___ AGRON 110 (0.5) or GEN 110 (1)
- ___ AGRON 114 (3)
- ___ AGRON 154 (3)
- ___ GEOL 100 (3)
- ___ AGRON 206 (3)
- ___ AGRON 210 (1)
- ___ AGRON 310 (R) OR 311 (1)
- ___ AGRON 316 (3)
- ___ AGRON 354 & 354L (4)
- ___ AGRON 410 (1) or GEN 491 (1)
- ___ Ag Issues Choice (3), e.g. AGRON 342

VIII. Plant Breeding & Biotechnology (12-13 credits)

- ___ AGRON 421 (3) *fall only*
- ___ GEN 444 (3)
- ___ AGRON 392 (3)
- ___ AGRON 212 & L (4) or 338 (3) *fall only*

IX. Free Electives (None are required.)

This list includes maximum overlap between the two programs. Minimum credits total to 138; more may be required depending on your choice of courses.

For specific advising, please see Dr. Lois Girton (Genetics) lgirton@iastate.edu; 294-1606 and Dr. Mary Wiedenhoef (Agronomy) mwiedenh@iastate.edu; 294-3274. Sept 2014(LG/MW)