

Fall 2017 Plant Biology Option Courses - DRAFT

1. Mathematics

| | | | Credits |
|------------|-----|------------------------------|---------|
| Math | 171 | Calc with Algebra & Trig I | 5 |
| Math | 221 | Calculus&Analytic Geometry 1 | 5 |
| Math | 222 | Calculus&Analytic Geometry 2 | 4 |
| Statistics | 301 | Intro-Statistical Methods | 3 |
| Statistics | 371 | Intro Applied Stats-Life Sci | 3 |

2. Chemistry

| | | | |
|-----------|-----|-----------------------------|---|
| Chemistry | 103 | General Chemistry I | 4 |
| Chemistry | 104 | General Chemistry II | 5 |
| Chemistry | 109 | Advanced General Chemistry | 5 |
| Chemistry | 343 | Intro Organic Chemistry | 3 |
| Chemistry | 344 | Intro Organic Chemistry Lab | 2 |
| Chemistry | 345 | Intmed Organic Chemistry | 3 |

3. Physics

| | | | |
|---------|-----|-----------------|---|
| Physics | 103 | General Physics | 4 |
| Physics | 104 | General Physics | 4 |
| Physics | 201 | General Physics | 5 |
| Physics | 202 | General Physics | 5 |
| Physics | 207 | General Physics | 5 |
| Physics | 208 | General Physics | 5 |

4. Introductory Biology

| | | | |
|------------------------|------|------------------------------------|---|
| Biology/Zoology | 101 | Animal Biology | 3 |
| Biology/Zoology | 102 | Animal Biology Laboratory | 2 |
| Biology/Botany | 130 | General Botany | 5 |
| Biology/Botany/Zoology | 151 | Introductory Biology | 5 |
| Biology/Botany/Zoology | 152 | Introductory Biology | 5 |
| Biocore | 381 | Evolution, Ecology, & Genetics | 3 |
| Biocore | 382 | Evolution, Ecology, & Genetics Lab | 2 |
| Biocore | 485 | Organismal Biology | 2 |
| Biocore | 486* | Organismal Biology Lab | 2 |

*Biocore policy amended, see advisor for details.

Foundational Courses (not required if completing Biocore)

| | | | |
|----------|-----|------------------------|---|
| Biochem | 501 | Introduction-Biochem | 3 |
| Genetics | 466 | Principles of Genetics | 3 |

5A. Cellular and Subcellular Biology

| | | | Credits | Approved Lab |
|----------------------|-----|--|---------|--------------|
| Agronomy/Botany/Hort | 339 | Plant Biotechnology: Principles & Techniques 1 | 4 | Y |
| Biochem | 501 | Introduction to Biochemistry | 3 | |
| Biochem | 507 | General Biochemistry I | 3 | |
| Genetics | 466 | General Genetics | 3 | |
| Genetics | 467 | General Genetics I | 3 | |

5B. Organismal Biology

| | | | Credits | Approved Lab |
|-----------------|------|---|---------|--------------|
| Biocore | 486* | Organismal Biology Laboratory | 2 | Y |
| Botany | 300 | Plant Anatomy | 4 | Y |
| Botany | 330 | Algae | 3 | Y |
| Botany/F&W Ecol | 402 | Dendrology | 2 | Y |

| | | | | |
|---------------|-----|--|---|---|
| Entom/Zoology | 302 | Introduction to Entomology | 4 | Y |
|---------------|-----|--|---|---|

| 5C. Ecology | | | Credits | Approved Lab |
|----------------------------------|-----|---|---------|--------------|
| Agron/Botany/Soil Sci | 370 | Grassland Ecology | 3 | |
| Botany/F&W Ecol | 455 | Vegetation of Wisconsin | 4 | Y |
| Botany/F&W Ecol/Zoology | 460 | General Ecology | 4 | Y |
| Botany/Envir St/F&W Ecol/Zoology | 651 | Conservation Biology | 3 | |
| F&W Ecol | 550 | Forest Ecology | 3 | |
| PI Path | 300 | Introduction to Plant Pathology | 4 | Y |

| 5D. Evolution and Systematic Biology | | | Credits | Approved Lab |
|---|-----|--------------------------------------|---------|--------------|
| Anthro/Botany/Zoology | 410 | Evolutionary Biology | 3 | |
| Botany | 400 | Plant Systematics | 4 | Y |

| 5E. Applied Biology, Agricultural and Natural Resources | | | Credits | Approved Lab |
|--|-----|---|---------|--------------|
| Agronomy | 302 | Forage Management & Utilization | 3 | |
| Amer Ind/Anthro/Botany | 474 | Ethnobotany | 3 | |
| Biology/Genetics | 522 | Evolution Seminar Series | 1 | |
| Botany | 403 | Field Collections & Identification | 1 to 4 | N |
| F&W Ecol/Hort/Land Arc/PI Path | 309 | Diseases of Trees & Shrubs | 3 | N |
| F&W Ecol | 415 | Tree Physiology | 3 | |
| Genetics | 677 | Evolutionary Systems Biology | 3 | Y |
| Hort/Land Arc | 263 | Landscape Plants I | 3 | Y |
| Hort | 370 | World Vegetable Crops | 3 | N |
| PI Path/Soil Sci | 323 | Soil Biology | 2 | |
| Zoology | 500 | Undergrad Neurobiology Seminar | 1 | |

6. Seminar

| | | | |
|---------------------|-----|--------------------------------------|---|
| Botany | 940 | Recent Advances in Plant Systematics | 1 |
| Plant Path | 923 | Seminar | 1 |
| Agron/Genetics/Hort | 957 | Seminar-Plant Breeding | 1 |

| CALS Capstone Courses | | | Credits |
|------------------------------|------|---|---------|
| Biocore | 486* | Organismal Biology Laboratory | 2 |
| Botany/F&W Ecol | 455 | Vegetation of Wisconsin | 4 |
| Botany/F&W Ecol/Zoology | 460 | General Ecology | 4 |
| Zoology | 316 | Laboratory for Limnology- Conservation of Aquatic Resources | 3 |
| Zoology | 555 | Laboratory in Developmental Biology | 3 |

*Students must complete Biocore 382 & 384 to count 486 towards fulfilling requirement 5 OR 6.

Draft - 4/14/17