

**GENERAL AGRICULTURE  
PLANT AND SOIL SCIENCE CONCENTRATION**

**I. General Education Requirements**

**TOTAL REQUIRED FOR GENERAL EDUCATION – 43 Credits**

Students should consult with their freshman or departmental advisor when making course selections.

**A. Curriculum Area I - (Arts and Humanities) 9 Credits**

Students must select ENGL 203 plus two additional courses

**ARTS:** ARTS 101, ARTS 310, MUSI 100, MUSI 101, MUSI 109, MUSI 301H

**HISTORY:** HIST 201, HIST 202, HIST 333, HIST 334, HIST 341, HIST 360, ARTS 310

**LANGUAGE:** FREN 101, FREN 102, SPAN 101, SPAN 102

**LITERATURE:** ENGL 204, ENGL 205, ENGL 206, ENGL 207, ENGL 215, ENGL 218, ENGL 327, ENGL 328, ENGL 329, ENGL 401

**B. Curriculum Area II - (Social and Behavioral Sciences) 6 Credits**

Students must select one course in each of two disciplines:

**SOCIAL SCIENCES:** ECON 201 or ECON 201H, ECON 202 or ECON 202H, 3

GEOG 201 or GEOG 202, HIST 101 or HIST 111H,

HIST 102 or HIST 112H, POLI 200 or POLI 200H, POLI 342

SOCI 101 or SOCI 111H

**BEHAVIORAL SCIENCES:** CRJS 101, HUEC 203, HUEDC 220, HUEC 361, 3

PSYC 200, SOCI 201, SOWK 200 or SOWK 200H

**C. Curriculum Area III - (Biological and Physical Sciences) 12 Credits**

| Course No. | Title                          | Credits |
|------------|--------------------------------|---------|
| CHEM 111   | Principles of Chemistry I      | 3       |
| CHEM 113   | Principles of Chemistry I Lab  | 1       |
| CHEM 112   | Principles of Chemistry II     | 3       |
| CHEM 114   | Principles of Chemistry II Lab | 1       |
| BIOL 111   | Principles of Biology I        | 3       |
| BIOL 113   | Principles of Biology Lab I    | 1       |

**D. Curriculum Area IV - (Mathematics) 3 Credits**

| Course No. | Title                     | Credits |
|------------|---------------------------|---------|
| MATH 109   | College Algebra or Higher | 3       |

**E. Curriculum Area V - (English Composition) 9 Credits**

| Course No. | Title                       | Credits |
|------------|-----------------------------|---------|
| ENGL 101   | Basic Composition I         | 3       |
| ENGL 102   | Basic Composition II        | 3       |
| ENGL 305   | Technical Writing <u>or</u> |         |
| ENGL 310   | Advanced Composition        | 3       |

**F. Curriculum Area VI - (Emerging Issues) 4 Credits**

| Course No. | Title                         | Credits |
|------------|-------------------------------|---------|
| EDHE 111   | Personalized Health Fitness   | 3       |
| AGNR 111   | First Year Experience Seminar | 1*      |

**\*Required for all Department of Agriculture Students**

**II. Program Core Requirements\*** **15 Credits**

| Course No. | Title   | Credits |
|------------|---|---------|
| ANPT 114   | Introduction to Animal Science                | 4       |
| PLSC 184   | Introduction to Plant Science                 | 3       |
| PLSC 185   | Introduction to Plant Science Lab             | 1       |
| AGEC 213   | Introduction to Agriculture Economics         | 3       |
| AGME 283   | Engineering Principles Applied to Agriculture | 3       |
| AGRI 301   | Seminar                                       | 1       |

**III. Major Requirements** **24 Credits**

| Course No. | Title  | Credits |
|------------|--|---------|
| AMIC 324   | Agricultural Microbiology                          | 4       |
| HORT 203   | Introduction to Horticultural Science <b>or</b>    |         |
| HORT 203H  | Honors Introduction to Horticultural Sciences      | 3       |
| SOIL 203   | Introduction to Soil Science                       | 3       |
| BIOL 112   | Principle of Biology II <b>and</b>                 |         |
| BIOL 114   | Principle of Biology Lab II <b>or</b>              |         |
| BIOL 112H  | Honors Principles of Biology II <b>and</b>         |         |
| BIOL 114H  | Honors Principles of Biology II Lab                | 4       |
| AGRN 423   | Plant Nutrition & Soil Fertility                   | 3       |
| BUED 212   | Computer Concepts/Applications I <b>and</b>        | 3       |
| CHEM 211   | Fundamentals of Organic Chemistry I <b>or</b>      |         |
| CHEM 213   | Fundamentals of Organic Chemistry I Lab <b>and</b> |         |
| CHEM 211H  | Honors Fundamentals of Organic Chemistry I Lab     | 4       |

\* A minimum grade of "C" is required for each of these courses

**IV. Supportive Requirements\*\*** **24 Credits**

Select a minimum of 24 credit hours

| Course No. | Title  | Credits |
|------------|--|---------|
| HORT 313   | Floriculture & Ornamental Horticulture <b>or</b> |         |
| HORT 313H  | Honors Floriculture & Ornamental Horticulture    | 3       |
| HORT 333   | Landscape Design Theory                          | 3       |
| HORT 353   | Turf Maintenance and Management                  | 3       |
| HORT 383   | Horticultural Therapy                            | 3       |
| HORT 463   | Plant Tissue Culture                             | 3       |
| ENTO 313   | General and Applied Entomology                   | 3       |
| AGME       | Select Courses with Advisor's Approval           |         |
| AGRN 333A  | Weed Science                                     | 3       |
| AGNR 353   | Natural Resources Conservation                   | 3       |
| AGNR 283   | Agriculture and the Environment                  | 3       |
| AGNR 483   | Principles of Geographic Information Systems     | 3       |
| AGRN 463/H | Plant Genetics & Breeding                        | 3       |
| HORT 423/H | Horticultural Crops                              | 3       |
| PLSC 283   | Agriculture and the Environment                  | 3       |
| AGRN 413/H | Global Agronomic Crops                           | 3       |
| SOIL 443/H | Soil Chemistry                                   | 3       |
| AGRI 499   | Special Topics in Agriculture                    | 3       |
| PLSC 474   | Plant Pathology <b>or</b>                        |         |
| PLSC 474H  | Honors Plant Pathology                           | 4       |
| AGRN 499   | Independent Study in Plant & Soil Sci.           | 1-4     |
| PLSC 440   | Plant Physiology                                 | 4       |
| AGRI 483/H | Recombinant DNA Technology                       | 3       |
| FDST 493   | Food Chemistry                                   | 3       |
| NRES 404   | Conservation Biology                             | 3       |
| PLSC 484   | Internship in Agriculture and Natural Resources  | 3-6     |

Select a minimum of 11 credit hours

| <b>Course No.</b> | <b>Title</b>                             | <b>Credits</b> |
|-------------------|--|----------------|
| BIOL 222          | Genetics                                 | 3              |
| BIOL 223          | Genetics Lab                             | 1              |
| BIOL 402          | Ecology                                  | 4              |
| BUAD              | Select Courses with Advisor's Approval   |                |
| BUED              | Select Courses with Advisor's Approval   |                |
| CHEM 212          | Fundamentals of Organic Chemistry II     | 3              |
| CHEM 214          | Fundamentals of Organic Chemistry II Lab | 1              |
| CHEM 311          | Analytical Chemistry I                   | 4              |
| CHEM 312          | Analytical Chemistry II                  | 4              |
| PHYS              | Select Courses with Advisor's Approval   |                |
| ENVS              | Select Courses with Advisor's Approval   |                |
| CHEM 341          | Biochemistry I                           | 3              |
| CHEM 343          | Biochemistry I Lab                       | 1              |
| MATH              | Select Courses with Advisor's Approval   |                |
| HUEC              | Select Courses with Advisor's Approval   |                |
| ENVS              | Choice of an ENVS Course                 | 3-4            |

**\*\* A minimum cumulative grade of C (GPA 2.0) is required for Supportive Courses**

**V. Elective Requirements 3 Credits**

Electives must be chosen with the approval of the student's advisor

**TOTAL PROGRAM REQUIREMENTS 120**

**PLANT AND SOIL SCIENCE CONCENTRATION**  
**Recommended Course Sequence**

**FRESHMAN YEAR**

| <b>FALL SEMESTER</b>  |       |                                      | <b>HOURS</b> |
|-----------------------|-------|--------------------------------------|--------------|
| AGNR                  | 111   | First Year Exper. Seminar            | 1            |
| ENGL                  | 101/H | Basic Composition I                  | 3            |
| MATH                  | 109   | College Algebra or higher            | 3            |
| CHEM                  | 111   | Principles of Chemistry I <b>and</b> |              |
| CHEM                  | 113   | Principles of Chem. I Lab <b>or</b>  |              |
| CHEM                  | 111H  | Honors Principles of Chem. I         | 3            |
| CHEM                  | 113H  | Honors Principles of Chem. I Lab     | 1            |
| PLSC                  | 184   | Introduction to Plant Science        | 3            |
| PLSC                  | 185   | Intro to Plant Science Lab           | <u>1</u>     |
| <b>Semester Total</b> |       |                                      | <b>15</b>    |

| <b>SPRING SEMESTER</b> |       |  | <b>HOURS</b> |
|------------------------|-------|--|--------------|
| BIOL                   | 112   | Principles of Biology II <b>and</b>    |              |
| BIOL                   | 114   | Principles of Biology II Lab <b>or</b> |              |
| BIOL                   | 112H  | Honors Prins. of Biology II <b>and</b> | 3            |
| BIOL                   | 114H  | Honors Prin. of Biology II Lab         | 1            |
| CHEM                   | 112/H | Principles of Chemistry II             | 3            |
| CHEM                   | 114   | Principles of Chemistry II Lab         | 1            |
| ENGL                   | 102   | Basic Composition II <b>or</b>         |              |
| ENGL                   | 102H  | Honors Basic Composition II            | 3            |
|                        |       | CURR. AREA I                           | 3            |
| EDHE                   | 111   | Personalized Health Fitness            | <u>3</u>     |
| <b>Semester Total</b>  |       |  | <b>17</b>    |

**SOPHOMORE YEAR**

| <b>FALL SEMESTER</b>  |      |  | <b>HOURS</b> |
|-----------------------|------|--|--------------|
| ANPT                  | 114  | Intro. to Animal Science <b>or</b>     |              |
| ANPT                  | 114H | Honors Intro. to Animal Sci.           | 4            |
| AGEC                  | 213  | Intro. to Ag. Economics <b>or</b>      |              |
| AGEC                  | 213H | Honors Intro. to Ag Economics          | 3            |
| HORT                  | 203  | Intro to Horticultural Sci.            | 3            |
| ENGL                  | 203  | Fund. of Contemporary Speech           | 3            |
| CHEM                  | 211  | Fund. Of Organic Chem. I <b>and</b>    |              |
| CHEM                  | 213  | Fund. of Organic Chem. I Lab <b>or</b> |              |
| CHEM                  | 211H | Hnrs. Fund. of Organ. Chem.            |              |
|                       |      | <b>I and</b>                           | 3            |
| CHEM                  | 213H | Hnrs. Fund. of Organ. Chem.            |              |
|                       |      | I Lab                                  | <u>1</u>     |
| <b>Semester Total</b> |      |  | <b>17</b>    |

| <b>SPRING SEMESTER</b> |      |   | <b>HOURS</b> |
|------------------------|------|---|--------------|
| AGRN                   | 203  | Introduction to Soil Science                  | 3            |
| AGME                   | 283  | Engineering Principles Applied to Agriculture | 3            |
| BIOL                   | 111  | Principles of Biology I <b>and</b>            |              |
| BIOL                   | 113  | Principles of Biology Lab I <b>or</b>         |              |
| BIOL                   | 111H | Honors Prin. of Biology I                     | 3            |
| BIOL                   | 113H | Honors Prin. of Biology I                     | 1            |
|                        |      | GE CURR. AREA II                              | 3            |
| BUED                   | 212  | Computer Concepts/Appl I                      | <u>3</u>     |
| <b>Semester Total</b>  |      |   | <b>16</b>    |

**JUNIOR YEAR**

| <b>FALL SEMESTER</b>  |     |  | <b>HOURS</b> |
|-----------------------|-----|--|--------------|
|                       |     | Science or Math Sup. Course                              | 3            |
| ENGL                  | 305 | Technical Writing  | 3            |
|                       |     | Plant & Soil Sci. Elective,<br>Math or Sci. Supp. Course | 3            |
|                       |     | GER CURR. AREA I   | <u>6</u>     |
| <b>Semester Total</b> |     |  | <b>15</b>    |

| <b>SPRING SEMESTER</b> |     |  | <b>HOURS</b> |
|------------------------|-----|--|--------------|
| AMIC                   | 324 | Agricultural Microbiology  | 4            |
|                        |     | Science or Math Sup. Course<br>and/or Plant and Soil Science<br>Elective | 3            |
|                        |     | GER CURR. AREA II  | 3            |
|                        |     | Science or Math Sup. Course  | 3            |
| AGRI                   | 301 | Agriculture Seminar  | <u>1</u>     |
| <b>Semester Total</b>  |     |  | <b>14</b>    |

**SENIOR YEAR**

| <b>FALL SEMESTER</b>  |      |  | <b>HOURS</b> |
|-----------------------|------|--|--------------|
| AGRN                  | 423  | Plant Nutri. and Soil Fert. <b>or</b>                                    |              |
| AGRM                  | 423H | Hnrs. Plant Nutri.& Soil Fert.   | 3            |
|                       |      | Science or Math Electives <b>and/or</b><br>Plant/ Soil Science Electives | 7            |
|                       |      | Science, Math or Plant/Soil<br>Science Supportive Course                 | <u>3</u>     |
| <b>Semester Total</b> |      |  | <b>13</b>    |

| <b>SPRING SEMESTER</b>        |  |                                  | <b>HOURS</b> |
|-------------------------------|--|----------------------------------|--------------|
|                               |  | *FREE Elective                   | 3            |
|                               |  | Plant and Soil Science Elective  | 3            |
|                               |  | Plant and Soil Science Electives | <u>7</u>     |
| <b>Semester Total</b>         |  |                                  | <b>13</b>    |
| <b>Total Required Credits</b> |  |                                  | <b>120</b>   |

