**Biology Agriculture Science 2023-2024**

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| **Freshman Year** |
| **Fall** | **Spring** |
|  | Course Number | Course Title | Credits |  | Course Number | Course Title | Credits |
|  | UNV 1000 | Freshman Seminar  | 1 |  | ENG 1060 | Composition II | 3 |
|  | ENG 1050 | Composition 1  | 3 |  | BIO 1010 or BIO 1020 | General Botany orGeneral Zoology | 4 |
|  | MAT 1070 or MAT 1090 | College Algebra or Precalculus | 3 or4 |  | CHM 1300 | General Chemistry | 3 |
|  | BIO 1000\* | Principles of Biology  | 3 |  | CHM 1100 | General Chemistry Laboratory I | 1 |
|  | BIOL 1000 | Laboratory Investigations and Experiences in General Biology  | 1 |  | BIO 2010 (this is an elective course – see Plant Cropping electives)(ORGeneral Education) | Techniquesin Horticulture(ORFine Arts&Physical Education) | 4(3)(1) |
|  | BIO 1040(odd years only)(ORGeneral Education) | Introduction to Animal Science(ORFine Arts) | 3(3) |  |
| **Total Credits**  | 14-15 |  | **Total Credits**  | 15 |

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| **Sophomore Year** |
| **Fall** | **Spring** |
|  | Course Number | Course Title | Credits |  | Course Number | Course Title | Credits |
|  | BIO 1010 orBIO 1020 | General Botany orGeneral Zoology | 4 |  | MAT 2100 | Introduction to Statistics | 3 |
|  | CHM 1310 | General Chemistry II | 3 |  | ENV 2450 (odd years only) | Principles of Sustainable Agriculture  | 4 |
|  | CHM 1110 | General Chemistry Laboratory II  | 1 |  | General Education  | Literature | 3 |
|  | Agricultural Science Elective\*\* |  | 3-4 |  | University Wide Electives \*\*\* |  | 3 |
|  | General Education  | History | 3 |  | University Wide Electives \*\*\* |  | 3 |
| **Total Credits** | 14-15 |  | **Total Credits** | 15 |

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| **Junior Year** |
| Fall | Spring |
|  | Course Number | Course Title | Credits |  | Course Number | Course Title | Credits |
|  | BIO 3180 | Principles of Genetics | 4 |  | ENV 3250  | Plant Cropping and Weed Management | 3 |
|  | ENV 3200 (may be taught in Spring odd years instead) | Soils and Hydrology | 4 |  | BIO 3040 | Principles of Ecology | 4 |
|  | Agricultural Science Elective\*\* (ENV 3250 taught in even years only) |  | 3-4 |  | Agricultural Science Elective\*\* |  | 3-4 |
|  | General Education | Social Science | 3 |  | General Education  | Elective | 3 |
|  | General Education | Physical Education | 1 |  | General Education  | Philosophy and Religion  | 3 |
| **Total Credits** | 15-16 | **Total Credits** | 15-16 |

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| **Senior Year** |
| **Fall** | **Spring** |
|  | Course Number | Course Title | Credits |  | Course Number | Course Title | Credits |
|  | ENV 4200 (even years only) | Pest Management | 3 |  | BIO 4700 (WD) |  | 3 |
|  | BIO 4010 | Agriculture Internship  | 3 |  | General Education | Social Science | 3 |
|  | General Education | Social Science | 3 |  | University Wide Electives\*\*\* |  | 3 |
|  | University Wide Electives\*\*\* |  | 3 |  | University Wide Electives\*\*\* |  | 3 |
|  | University Wide Electives\*\*\* |  | 3 |  | University Wide Electives\*\*\* |  | 3 |
| **Total Credits** | 15 | **Total Credits** | 15 |

\*\*Approved Agricultural Science Electives

Students may take any of the courses from the list below, but we recommend that students consider adopting one of the Areas of Interest outlined below and take elective courses accordingly. Courses with missing course numbers are in the approval process with Academic Affairs and should be added to the catalog beginning in 2020-2021

**Arranged by Areas of Interest:**

* ***Area of interest – Animal Husbandry***BIO 3190 Animal Parasitology (4), BIO 2410 Animal Nutrition (3), BTEC 4300 Principles of Medical Biotechnology (3)
* ***Area of interest – Plant Cropping***BIO 3540 Plant Physiology (4), BIO 3010 Entomology (4), BIO 2010 Techniques in Horticulture (4)
* ***Area of interest – Niche Farming***
BIO 3050 Mycology (3), BIO 2420 Beekeeping (3), BIO 3020 Greenhouse Crop Production and Management (4)
* ***Area of interest – Food Systems***ENV 4100 Environmental Laws and Regulations (3), ECN 3080 Environmental Economics (3), SOC 2090 Food Inequality and Social Justice (3)
* ***Area of interest – Sustainable Agriculture***BIO 3420 Pollution Ecology (3), BIO 4320 Conservation Biology (4), BIO 4510 Small Farm Systems (4), ENV 3100 Freshwater Ecosystems and Watershed Management (4)
* ***Area of interest – Agricultural Technology***GLY 2700 Intro to GIS (4), GLY 4040 Remote Sensing (3), GLY 2620 Environmental Geology (3),
GLY 2460 Weather and Climate (3)

**\*\*\* Students with an interest in entrepreneurship or small business are encouraged to use some of their university electives to obtain an Entrepreneurship Certificate. The following courses are required for this certificate: ENTR 2000, ENTR 2100, ENTR 4000**