

Crop Science Major, Research/Biotechnology Emphasis Plan

This sample curriculum shows most lower-division courses selected freshman and sophomore years, and most upper-division courses selected junior and senior years.

Students should consult with their advisor to develop a plan of study tailored to their individual needs and interests.

Freshman Year (29 credits)

Fall Semester (15 credits)

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| BIOL 1610 ¹ Biology I | 4 |
| MATH 1050 (QL) ¹ College Algebra | 4 |
| PSC 1050 ¹ Plants, Soils, and Climate Orientation | 1 |
| CHEM 1210 ² Principles of Chemistry I | 4 |
| CHEM 1215 ² Chemical Principles Laboratory I | 1 |
| Elective course ³ | 1 |

Spring Semester (14 credits)

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| BIOL 1620 (BLS) ¹ Biology II | 4 |
| CHEM 1220 (BPS) ² Principles of Chemistry II | 4 |
| CHEM 1225 ² Chemical Principles Laboratory II | 1 |
| ECN 1500 (BAI) ¹ Introduction to Economic Institutions, History, and Principles | 3 |
| MATH 1060 ² Trigonometry | 2 |

Sophomore Year (33 credits)

Fall Semester (14 credits)

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| CHEM 2310 ² Organic Chemistry I | 4 |
| CHEM 2315 ² Organic Chemistry Laboratory I | 1 |
| ENGL 1010 (CL1) Introduction to Writing: Academic Prose | 3 |
| USU 1330 (BCA) Civilization: Creative Arts | 3 |
| Elective course(s) ³ | 3 |

Spring Semester (19 credits)

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| CHEM 2320 ² Organic Chemistry II | 4 |
| CHEM 2325 ² Organic Chemistry Laboratory II (blocks 1 & 2) | 1 |
| PHYS 1200 (BPS) ¹ Introduction to Physics by Hands-on Exploration | 4 |
| BUS 3100 (DSS) ⁴ Survey of Management Information Systems | 3 |
| MATH 1210 (QL) ⁶ Calculus I | 4 |
| USU 1320 (BHU) Civilization: Humanities | 3 |

Junior Year (28 credits)

Fall Semester (15 credits)

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| BIOL 3060 (QI) ² Principles of Genetics | 4 |
| ENGL 2010 (CL2) ⁴ Intermediate Writing: Research Writing in a Persuasive Mode | 3 |
| PSC 3000 ¹ Fundamentals of Soil Science | 4 |
| PSC 3700 ⁵ Plant Propagation | 4 |

Spring Semester (13 credits)

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| CHEM 3700 ² Introductory Biochemistry | 3 |
| CHEM 3710 ² Introductory Biochemistry Laboratory | 1 |
| HIST 3850 (DHA/CI) ⁴ History of Utah | 3 |
| PSC 4600 (DSC/QI) ⁵ Cereal Science (taught even years <i>only</i>) | 3 |
| PSC 5700 Principles of Plant Breeding (taught odd years <i>only</i>) | 3 |

Senior Year (31 credits)

Fall Semester (15 credits)

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| BIOL 4400 (QI) ¹ Plant Physiology | 4 |
| BIOL 5210 ⁶ Cell Biology | 3 |
| PSC 5550 ⁵ Weed Biology and Control | 4 |
| Elective course(s) ³ | 4 |

Spring Semester (16 credits)

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| BIOL 5230 ⁶ Developmental Biology | 3 |
| PSC 4890 (CI) ¹ Senior Seminar | 1 |
| PSC 5270 ² Environmental Plant Physiology | 2 |
| PSC 5530 (QI) ² Soils and Plant Nutrient Bioavailability | 3 |
| PSC 5750 ² Crop Biotechnology (taught odd years <i>only</i>) | 2 |
| Elective course(s) ³ | 5 |

¹This course is required as part of the Crop Science Major Core.

²This course is required for the Research/Biotechnology Emphasis.

³This course is an unrestricted elective. Some suggested courses are indicated.

⁴This course is a restricted elective. Other courses may be used to satisfy this requirement.

⁵This course is included in the Additional Crop-related Courses for the Research/Biotechnology Emphasis.

⁶This course is a recommended elective for the Research/Biotechnology Emphasis.