

**Botany Major. 2001-2002, 2002-2003.**

A minor is required. (Required support courses in Track A provide a minor in Chemistry. It is the student's responsibility to formally declare the minor in chemistry.)

Overall GPA of 2.00 in all courses is required.

Graduation requires 120 credit hours, with a minimum of 40 upper division credit hours.

<b>Required Courses, both tracks (16 Credit Hours)</b>	semester planned	semester actual	grade	comments
Botany LS1403, Environment Appreciation (3) or Botany 3403, Environment Appreciation (3)				
Botany SI2104, Plant Form and Function (4)				
Botany SI2114, Evolutionary Survey of the Plant Kingdom (4)				
Botany 2121, Career Planning for Botanists (1)				
Botany DV2303, Ethnobotany (3)				
Botany 2600, Laboratory Safety (1)				

Botany LS1105 can substitute for Botany SI2104 + SI2114.

Botany LS110 + 112 + 298 (7 semester hours) **or** Botany LS110 + 2920 (6.3 semester hours) can substitute for Botany SI2104 + SI2114.

Chemistry 2600, Geoscience 2600, Microbiology 2600, or Physics 2600 can substitute for Botany 2600.

Botany LS140 **or** 314 (3.3 semester hours) can substitute for Botany LS1403.

Botany 201 (2.7 semester hours), Botany 313 (2.7 semester hours), Botany 2013 (3), and Botany 3133 (3) are **not** equivalent to Botany DV2303. Botany 201, 313, 2013, or 3133 can be used to meet the Botany requirement for an ethnobotany class, however, none of these courses meets the university DV requirement.

**Track A**

<b>Required Botany Courses</b> (19-20 credit hours)	semester planned	semester actual	grade	comments
Botany 3105, Anatomy and Morphology of Vascular Plants (5)				
Botany 3204, Plant Physiology (4)				
Botany 3303, Plant Genetics (3)				
Botany 3340, Information Resources in the Life Sciences (2)				no longer taught
Botany 4840, Thesis Readings (2) <b>or</b> Botany 4830, Readings in Botany (2)				
Botany 4850, Thesis Research (2) <b>or</b> Botany 4800, Individual Research (2)				
Botany 4970, Botany Thesis (2) <b>or</b> Botany 4990, Seminar in Botany (1)				
<b>Botany Electives</b> (16 credit hours minimum)	semester planned	semester actual	grade	comments
Botany 2203, Home and Garden Plants (3)				
Botany 2503, Biology of the Plant Cell (3)				
Botany 3214, Soils (4)				

Botany 3454, Plant Ecology (4)				
Botany 3473, Plant Geography (3)				
Botany 3504, Mycology (4)				
Botany 3514, Algology (4)				
Botany 3523, Marine Biology (3)				
Botany 3624, Taxonomy of the Vascular Plants (4)				
Botany 3641A, Intermountain Flora: Woody Plants (1)				
Botany 3641B, Intermountain Flora: Montane Forbs (1)				
Botany 3641C, Intermountain Flora: Wetland Plants (1)				
Botany 3641D, Intermountain Flora: Grasses (1)				
Botany 4113, Plant Evolution (3)				
Botany 4252, Cell Culture (2)				

Botany 4750, Topics in Botany* (indicate the number of credit hours and course title)				
Botany 4890, Cooperative Work Experience* (indicate the number of credit hours)				

All of the equivalent quarter courses can substitute for the semester courses listed. 1 quarter hour = 2/3 semester hour

<b>Required Support Courses</b> (44-49 credit hours)	semester planned	semester actual	grade	comments
Chem PS1210, Principles of Chemistry I (5)				
Chem PS1220, Principles of Chemistry II (5)				
Chem 2310, Organic Chemistry I (5)				
Chem 2320, Organic Chemistry II (5)				
Chem 3030, Quantitative Analysis (4) <b>or</b> Chem 3070, Biochemistry I (4)				
Math QL1050 + 1060, College Algebra + Trigonometry (7) <b>or</b> Math QL1080, Pre-Calculus (5) <b>or</b> Math QL SI 1210, Calculus I (4) <b>or</b> Math QL1040, Introduction to Statistics (3)				

Phsx 2010 + 2010L, General Physics I (5) <b>or</b> Phsx 2210 + 2210L, Physics for Scientists and Engineers I (5)				
Phsx 2020 + 2020L, General Physics II (5) <b>or</b> Phsx 2220 + 2220L, Physics for Scientists and Engineers II (5)				
<b>Two of the following courses:</b>	semester planned	semester actual	grade	comments
Geoscience 1110, Physical Geology (3)				
Micro 2054, Principles of Microbiology (4)				
Zool 1110, Principles of Zoology I (4)				
Zool 1120, Principles of Zoology II (4)				

All of the equivalent quarter courses can substitute for the semester courses listed. 1 quarter hour = 2/3 semester hour

**Track B**

<b>Required Botany Courses (20-21 credit hours)</b>	semester planned	semester actual	grade	comments
Botany 2413, Introduction to Natural Resource Management (3)				
Botany 3214, Soils (4)				
Botany 3454, Plant Ecology (4)				
Botany 3624, Taxonomy of the Vascular Plants (4)				
Botany 4950, Advanced Field Botany (4)				
Botany 4970, Botany Thesis (2) <b>or</b> Botany 4990, Seminar in Botany (1)				
<b>Botany Electives (12 credit hours minimum)</b>	semester planned	semester actual	grade	comments
Botany 2203, Home and Garden Plants (3)				
Botany 2503, Biology of the Plant Cell (3)				
Botany 3105, Anatomy and Morphology of Vascular Plants (5)				
Botany 3204, Plant Physiology (4)				

Botany 3303, Plant Genetics (3)				
Botany 3340, Information Resources in the Life Sciences (2)				no longer taught
Botany 3473, Plant Geography (3)				
Botany 3504, Mycology (4)				
Botany 3514, Algology (4)				
Botany 3523, Marine Biology (3)				
Botany 3641A, Intermountain Flora: Woody Plants (1)				
Botany 3641B, Intermountain Flora: Montane Forbs (1)				
Botany 3641C, Intermountain Flora: Wetland Plants (1)				
Botany 3641D, Intermountain Flora: Grasses (1)				
Botany 4113, Plant Evolution (3)				
Botany 4252, Cell Culture (2)				

Botany 4750, Topics in Botany* (indicate the number of credit hours and course title)				
Botany 4840, Thesis Readings (2) <b>or</b> Botany 4830, Readings in Botany (2)				
Botany 4850, Thesis Research (2) <b>or</b> Botany 4800, Individual Research (2)				
Botany 4890, Cooperative Work Experience* (indicate the number of credit hours)				

All of the equivalent quarter courses can substitute for the semester courses listed. 1 quarter hour = 2/3 semester hour

<b>Required Support Courses</b> (44-49 credit hours)	semester planned	semester actual	grade	comments
Chem PS1110, Elementary Chemistry (5)				
ChemPS1120, Elementary Organic/Biochemistry (5)				
Geosci PS1110, Physical Geology (3)				
Math QL1050, College Algebra (4) <b>or</b> Math QL1040, Introduction to Statistics (3)				
PhsxPS1010, Introduction to Physics (3)				

Zool 1110, Principles of Zoology I (4)				
Select <b>either</b> the two Micro courses <b>or</b> the three Geosci courses:	semester planned	semester actual	grade	comments
Micro 2054, Principles of Microbiology (4)				
Micro 3484, Environmental Microbiology (4)				
Geosci 1120, Physical Geography Laboratory (1)				
Geosci 1130, Introduction to Meteorology (3)				
Geosci 1220, Historical Geology (4)				

All of the equivalent quarter courses can substitute for the semester courses listed. 1 quarter hour = 2/3 semester hour