

## Botany Major Requirements (118-131 credits)

### Foundational Sciences (47-50 credits)

#### Chemistry Series: *complete one series*

##### 100 level series

<input type="checkbox"/>	(5) CH 121	General Chemistry
<input type="checkbox"/>	(5) CH 122	General Chemistry - [preq CH 121: ≥ C-]
<input type="checkbox"/>	(5) CH 123	General Chemistry - [preq CH 122: ≥ C-]

##### 200 level series

<input type="checkbox"/>	(5) CH 231 & 261	General Chemistry & Lab - [p/coreq ≥ MTH 111Z or ALEKS ≥ 60]
<input type="checkbox"/>	(5) CH 232 & 262	General Chemistry & Lab - [preq CH 231: ≥ C-] & [CH 261: ≥ D]
<input type="checkbox"/>	(5) CH 233 & 263	General Chemistry & Lab - [preq CH 232: ≥ C-] & [CH 262: ≥ D]

#### Biology Series: *complete one series*

##### Corvallis campus

<input type="checkbox"/>	(4) BI 221	Prin of Biology: Cells - [p/coreq CH 121 or CH 231/261: ≥ D-]
<input type="checkbox"/>	(4) BI 222	Prin of Biology: Organisms - [preq BI 221: ≥ C-; p/coreq CH 121 or CH 231/261: ≥ D-]
<input type="checkbox"/>	(4) BI 223	Prin of Biology: Populations - [preq BI 221: ≥ C-; p/coreq CH 121 or CH 231/261: ≥ D-]

##### Ecampus

<input type="checkbox"/>	(4) BI 204	Introductory Biology I
<input type="checkbox"/>	(4) BI 205	Introductory Biology II - [preq BI 204: ≥ C-; p/coreq CH 121 or CH 231/261: ≥ D-]
<input type="checkbox"/>	(4) BI 206	Introductory Biology III - [preq BI 204: ≥ C-; p/coreq CH 121 or CH 231/261: ≥ D-]

#### Organic Chemistry

<input type="checkbox"/>	(4) CH 331	Organic Chemistry - [preq CH 123 or CH 233/263: ≥ C-]
<input type="checkbox"/>	(4) CH 332	Organic Chemistry - [preq CH 331: ≥ C-]

#### Cell & Molecular Biology

<input type="checkbox"/>	(4) BB 314	Cell Molecular Bio - [preq (BI 221-223) or (BI 204-206) & (CH 123 or CH 233/263): ≥ C-]
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#### Biochemistry: *choose 1*

<input type="checkbox"/>	(4) BB 350	Elementary Biochemistry - [preq CH 331 & p/coreq CH 332: ≥ D-]
<input type="checkbox"/>	(7) BB 450 & 451	General Biochemistry - [preq CH 332: ≥ D-] & [preq BB 450: ≥ D-]

#### Genetics: *choose 1*

<input type="checkbox"/>	(4) BI 311	Genetics - [preq (BI 221-223) or (BI 204-206): ≥ C-]
<input type="checkbox"/>	(4) PBG 430 & 431	Plant Genetics & Recitation - [rec 1 year biology & chemistry]

### Quantitative Skills & Analysis (18-22 credits)

#### Math: *choose 2*

<input type="checkbox"/>	(4) MTH 111Z	Precalculus I: Functions - [preq ALEKS ≥ 46 or (MTH 095 or MTH 103: ≥ C-)]
<input type="checkbox"/>	(4) MTH 112Z	Precalculus II: Trigonometry - [preq ALEKS ≥ 60 or (MTH 111Z: ≥ C-)]
<input type="checkbox"/>	(4) MTH 227	Calculus & Probability for Life Sciences I - [preq ALEKS ≥ 075 or (MTH 112Z: ≥ C-)]
<input type="checkbox"/>	(4) MTH 228	Calculus & Probability for Life Sciences I - [preq MTH 227: ≥ C-]
<input type="checkbox"/>	(4) MTH 241	Calculus for Management & Social Science - [preq ALEKS ≥ 60 or (MTH 111Z: ≥ C-)]
<input type="checkbox"/>	(4) MTH 245	Math for Management, Life, & Social Science - [preq ALEKS ≥ 60 or (MTH 111Z: ≥ C-)]
<input type="checkbox"/>	(4) MTH 251	Differential Calculus - [preq ALEKS ≥ 75 or (MTH 112Z: ≥ C-)]
<input type="checkbox"/>	(4) MTH 252	Integral Calculus - [preq MTH 251: ≥ C-]

#### Statistics

<input type="checkbox"/>	(4) ST 351	Introduction to Statistical Methods
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#### Additional Quatitatives Skills: *choose 2 (continued on next page)*

<input type="checkbox"/>	(4) MTH	3rd MTH class higher than MTH 111Z
<input type="checkbox"/>	(4) ST 352	Introduction to Statistical Methods - [preq ST 352: ≥ D-]

	(3)	CS 201	Computer Programming for Non-CS Majors - [preq $\geq$ MTH 111Z: $\geq$ C-]
	(3)	BDS 211	Use & Abuse of Data: Critical Think Sci - [p/coreq MTH 111Z: $\geq$ C-]
	(4)	BDS 310	Foundations of Biological Data Sciences - [p/coreq MTH 227 or MTH 251: $\geq$ C-]
	(3)	BDS 311	Computational Approaches for Biological Data - [preq BDS 310: $\geq$ C-]
	(4)	GEOG 360	GIScience I: Geographic Information Systems & Theory
	(4)	GEOG 460	GIS & Spatial Data Science - [preq GEOG 360 & ST 351 & (MTH 112Z or 251): $\geq$ C-]
	(5)	PH 201	General Physics - [rec MTH 111Z & MTH 112Z]
	(5)	PH 202	General Physics - [rec MTH 111Z & MTH 112Z & PH 201]
	(4)	CSS 205	Soil Science (Ecampus)
	(4)	SOIL 205 & 206	Soil Science (Corvallis campus) - [take concurrently]
	(4)	SOIL 316	Nutrient Cycl Agecosys - [preq (CH 121 or CH 231: $\geq$ D-) & (SOIL 205 or CSS 205: $\geq$ C)]

**Botany Major Core (32-36 credits)****Botany Core**

	(4)	BOT 220	Introduction to Plant Biology
	(4)	BOT 313	Plant Structure - [preq (BI 221 & 222) or (BI 205 & 206): $\geq$ D-]
	(4)	BOT 321	Plant Systematics - [rec BI 223]
	(4)	BOT 331	Plant Physiology - [preq (BI 221 & 222) or (BI 205 & 206) & (CH 123 or CH 233/263): $\geq$ D-]
	(3)	BOT 332	Laboratory Techniques in Plant Biology - [preq BB 314 or BOT 331: $\geq$ D-]
	(4)	BOT 341	Plant Ecology - [rec BOT 321 & BI 223]

**Non-Vascular: choose 1**

	(4)	BOT 416	Aquatic Botany - [rec BI 213]
	(4)	BOT 417	Phycology - [rec 1 year college level biology]
	(4)	BOT 461	Mycology - [preq (BI 221-223) or (BI 204-206): $\geq$ C-]
	(4)	BOT 465	Lichenology - [rec BI 223 and two botany courses]

**Writing Intensive Course (WIC): choose 1**

	(3)	BOT 323	Flowering Plants of the World - [rec (BI 221-223) or (BI 204-206)]
	(3-4)		or other approved WIC: BI 371, MB 311, SUS 325, SOIL 395, or WR 462

**Experiential Learning Activity: choose 1**

	(1-3)	BOT 401	Research - [advisor approval]
	(1-3)	BOT 406	Project: Curatorial Assistant - [department & advisor approval]
	(1-3)	BOT 410	Internship - [advisor approval]
	(0)	BOT 003	Undergraduate Research - [advisor approval]
	(0)	BOT 004	Internship - [advisor approval]

**Professional Development**

	(1)	BOT 407	Seminar
	(1)	BOT 411	Leveraging Your Experiential Learning

**Botany Option (21-23 credits): choose 1 option****Corvallis campus**

	Comprehensive Botany
	Customizable
	Ecology, Evolution, Conservation
	Molecular, Cellular, Genomics
	Mycology & Plant Pathology

**Ecampus**

	Customizable
	Mycology & Plant Pathology

**Baccalaureate Core (34-43 credits)\*****Skills Courses (17-19 credits)****Fitness (3 credits)** (2) HHS 231 (1) HHS 241 or any PAC class**Math (4 credits) - *double counted with major*** (4) Math met with Botany degree**Communications (10-12 credits)** (4) WR 121Z      Composition I - [alpha restrict last name (Fall: A-G), (Winter: H-N), (Spring: O-Z)] (3-4) WR II      (*recommend: WR 227Z or WR 323 or WR 362*) [req WR 121Z: ≥ C-] (3-4) Speech**Perspectives (12-16 credits) *no more than two from same subject area*** (3-4) Cultural Diversity (3-4) Literature & the Arts (3-4) Social Processes & Institutions (3-4) Western Culture**Physical & Biological Sciences (12-15 credits) - *double counted with major*** (4-5) Physical Science met with Botany degree (4-5) Biological Science met with Botany degree (4-5) Additional Biological or Physical Science met with Botany degree**Difference, Power, & Discrimination (3-4 credits)** (3-4) Difference, Power, & Discrimination**Synthesis (6-8 credits) *must be from different departments*** (3-4) Contemporary Global Issues (3-4) Science, Technology, & Society (*optional: BOT 324 or BOT 325*)**Electives (6-28 credits)\*** Needed for first degree students to meet the 180 credit requirement*\*Not required for Post Baccalaureate students who have already earned a bachelor's degree.*