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# **Crop and Weed Science Major**

# **Major Requirements**

Degree Type: B.S. Minimum Credits Required: 120

# **University Degree Requirements**

For complete details on these and other university degree requirements, refer to the Degree and Graduation Requirements (http://catalog.ndsu.edu/ academic-policies/undergraduate-policies/degree-and-graduation/) section in the University Catalog.

- 1. Minimum of 120 semester credits (some programs may exceed this minimum).
- 2. Complete the University General Education requirements.
- 3. Minimum institutional GPA of 2.00 based on work taken at NDSU.
- 4. Minimum of 30 credits in resident at NDSU.
- 5. Minimum of 36 upper level credits (courses numbered 300 or higher).
- 6. Students with transfer credit must meet the NDSU 30 credits in residence (#4). Of these 30 credits in residence, a minimum of 15 credits must be in courses numbered 300 or above, and 15 credits must be in the student's declared major curricula.

# **University General Education Requirements**

A list of university approved general education courses along with the administrative policies governing the requirement and the categories is available here (http://catalog.ndsu.edu/academic-policies/undergraduate-policies/general-education/).

Code	Title	Credits
Category C: Communication		12
Category R: Quantitative Reasoning		3
Category S: Science and Technology		10
Category A: Humanities and Fine Arts		6
Category B: Social and Behavioral Sciences		6
Category W: Wellness		2
Category D: Cultural Diversity		
Category G: Global Perspectives		
Category L: Digital Literacy		

**Total Credits** 

## **Major Requirements**

Code	Title	Credits
Required Courses for Crop & Weed S	ciences	
PLSC 189	Skills for Academic Success	1
BIOL 150 & 150L	General Biology I and General Biology I Laboratory	4
BIOL 151 & 151L	General Biology II and General Biology II Laboratory	4
CHEM 121 & 121L	General Chemistry I and General Chemistry I Laboratory	4
CHEM 122 & 122L	General Chemistry II and General Chemistry II Laboratory	4
ECON 201	Principles of Microeconomics	3
ENT 350	General Entomology	3
PLSC 110	World Food Crops	3
PLSC 215	Weed Identification	1
PLSC 225	Principles of Crop Production	3
PLSC 312	Expanding the Boundaries of Learning with Service	1
PLSC 315 & 315L	Genetics and Genetics Laboratory	4

PLSC 380	Principles of Plant Physiology	3
PLSC 420	Integrated Forage and Cover Crops Production Management and Ecosystem Services $^{2}$	3
PLSC 323	Principles of Weed Science	3
PLSC 455	Cropping Systems:An Integrated Approach <sup>2</sup>	3
PLSC 491	Seminar	1
PPTH 324	Introductory Plant Pathology	3
SOIL 210	Introduction to Soil Science	3
STAT 330	Introductory Statistics	3

#### Options: Select one from the following four option areas:

The standard default option for the major is Agronomy. Student wishing to pursue a different option must officially declare that option with the 16-27 Office of Registration and Records.

#### **Total Credits**

### **Agronomy Option**

For students interested in production agriculture.

Code	Title	Credits
Agronomy Requirements		
BIOL 461	Plant Ecology <sup>2</sup>	3-4
or BIOC 260	Elements of Biochemistry	
or CHEM 240	Survey of Organic Chemistry	
MATH 103	College Algebra (or higher)	3
MICR 202 & 202L	Introductory Microbiology and Introductory Microbiology Lab	3
SOIL 322	Soil Fertility and Fertilizers	3
PLSC 300-400	(No more than 2 credits of co-op allowed) $^2$	4
Total Credits		16-17

#### **Biotechnology Option**

For students interested in the biotechnology industry or pursuing graduate study in crop biotechnology.

Code	Title	Credits
<b>Biotechnology Requirement</b>	ts	
BIOC 460	Foundations of Biochemistry and Molecular Biology I $^{2}$	3
MATH 105	Trigonometry	3-4
or MATH 146	Applied Calculus I	
MICR 350	General Microbiology	5
& 350L	and General Microbiology Lab	
PLSC 453	Advanced Weed Science <sup>2</sup>	2-3
or PLSC 431	Intermediate Genetics	
PLSC 484	Plant Tissue Culture and Biotechnology <sup>2</sup>	3
Total Credits		16-18

#### **Science Option**

For students interested in advanced study and foundational studies.

Code	Title	Credits
Science Requirements		
CHEM 341 & 341L	Organic Chemistry I and Organic Chemistry I Laboratory	4
MATH 146	Applied Calculus I	4
MICR 202 & 202L	Introductory Microbiology and Introductory Microbiology Lab	3
PLSC 300-400	(No more than 2 credits of co-op may be used) $^2$	4

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Science and Math Electives	BIOC, BIOL, CHEM, MATH, MICR, and STAT prefix courses (100-400 level)	12
Total Credits		27

#### Weed Science Option

For students interested in crop consulting, weed science, and plant protection areas.

Code	Title	Credits
Weed Science Rquirements		
CHEM 240	Survey of Organic Chemistry	3-4
or BIOC 260	Elements of Biochemistry	
ENT 431	Principles of Insect Pest Management <sup>2</sup>	3
MATH 103	College Algebra (or higher level)	3
MICR 202	Introductory Microbiology	3
& 202L	and Introductory Microbiology Lab	
PLSC 433	Weed Biology and Ecology <sup>2</sup>	2
PLSC 453	Advanced Weed Science <sup>2</sup>	2
PPTH 454	Diseases Of Field and Forage Crops <sup>2</sup>	3
SOIL 322	Soil Fertility and Fertilizers	3
Total Credits		22-23

## **Degree Requirements and Notes**

• The major allows no more than 6 credits of cooperative education (co-op) to be counted toward degree requirements.

- 1 PLSC 189 is only required for first-time, first-year students. These are students who have not yet completed a college course as a college student. Student that are not first-time, first-year students that either transfer into the university or change their major are not required to take this requirement.
- 2 Students who are approved to complete the accelerated program in the Master of Science in Plant Sciences are eligible to complete the 600 level course with graduate supervisor approval. Students are allowed to take 15 graduate credits and apply the graduate credit to these undergraduate program requirements. Students are required to complete the Accelerated Degree Student Declaration form and make formal application to the NDSU Graduate School.