

Crop and Weed Science

Department Information

- **Department Web Site:**
www.ndsu.edu/agriculture/academics/academic-units/plant-sciences/undergraduate-majors/crop-and-weed-sciences (<http://www.ndsu.edu/agriculture/academics/academic-units/plant-sciences/undergraduate-majors/crop-and-weed-sciences/>)
- **Credential Offered:**
B.S.; Minor
- **Sample Program Guide:**
catalog.ndsu.edu/programs-study/undergraduate/crop-weed-science/#planofstudytext (<http://catalog.ndsu.edu/programs-study/undergraduate/crop-weed-science/#planofstudytext>)

Major Requirements

Major: Crop & Weed Sciences

Degree Type: B.S.

Minimum Degree Credits to Graduate: 120

University Degree Requirements

1. Satisfactory completion of all requirements of the curriculum in which one is enrolled.
2. Earn a minimum total of 120 credits in approved coursework. Some academic programs exceed this minimum.
3. Satisfactory completion of the general education requirements as specified by the university.
4. A minimum institutional GPA of 2.00 based on work taken at NDSU.
5. At least 30 credits must be NDSU resident credits. Resident credits include credits registered and paid for at NDSU.
6. At least 36 credits presented for graduation must be in courses numbered 300 or higher.
7. Students presenting transfer credit must meet the NDSU residence credits and the minimum upper level credit. Of the 30 credits earned in residence, a minimum of 15 semester credits must be in courses numbered 300 or above, and 15 semester credits must be in the student's curricula for their declared major.

For complete information, please refer to the Degree and Graduation Requirements (<http://catalog.ndsu.edu/past-bulletin-archive/2023-24/academic-policies/undergraduate-policies/degree-and-graduation/>) section of this Bulletin.

University General Education Requirements

Code	Title	Credits
Communication (C)		12
ENGL 110	College Composition I	
ENGL 120	College Composition II	
COMM 110	Fundamentals of Public Speaking	
Upper Division Writing [†]		
Quantitative Reasoning (R) [†]		3
Science and Technology (S) [†]		10
Humanities and Fine Arts (A) [†]		6
Social and Behavioral Sciences (B) [†]		6
Wellness (W) [†]		2
Cultural Diversity (D) ^{**†}		
Global Perspectives (G) ^{**†}		
Total Credits		39

* May be satisfied by completing courses in another General Education category.

[†] General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review major requirements to determine if specific courses can also satisfy these general education categories.

- A list of university approved general education courses and administrative policies are available here (<http://catalog.ndsu.edu/past-bulletin-archive/2023-24/academic-policies/undergraduate-policies/general-education/#genedcoursestext>).

Major Requirements

Code	Title	Credits
Required Courses for Crop & Weed Sciences		
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 (May satisfy general education category S)	4
CHEM 122 & 122L	General Chemistry II and General Chemistry II Laboratory (May satisfy general education category S)	4
ECON 201	Principles of Microeconomics (May satisfy general education category B and G)	3
ENT 350	General Entomology	3
PLSC 110	World Food Crops (May satisfy general education category S)	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 (May satisfy general education category S)	4
PLSC 320	Principles of Forage Production	3
PLSC 323	Principles of Weed Science	3
PLSC 444	Applied Plant Breeding and Research Methods	3
PLSC 455	Cropping Systems:An Integrated Approach	3
PLSC 491	Seminar	1
PPTH 324	Introductory Plant Pathology	3
SOIL 210	Introduction to Soil Science	3
STAT 330	Introductory Statistics (May satisfy general education category R)	3
Options: Select one of four options listed below.		19-30
The standard option for this major is Agronomy. Students who wish to declare a specific option must officially declare that option with the Office of Registration and Records.		
Total Credits		76

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AGRI189 is only required for first-time, first-year students—A first-time, first-year student is defined as a student who has not yet completed a college course as a college student. Students that are not first-time, first-year students that either transfer into the university or change their major are not required to take AGRI 189.

Agronomy Option - 19-20 Credits

For students interested in production agriculture; this option provides the most flexibility in course selection.

Code	Title	Credits
MICR 202 & 202L	Introductory Microbiology and Introductory Microbiology Lab	3
PLSC 380	Principles of Plant Physiology	3
CHEM 240 or BIOC 260 or BIOL 461	Survey of Organic Chemistry Elements of Biochemistry Plant Ecology	3-4
MATH 103	College Algebra (or higher)	3
PLSC 300-400	(no more than 2 credits of co-op)	4
SOIL 322	Soil Fertility and Fertilizers	3
Total Credits		19-20

Biotechnology Option - 19-21 Credits

For students who wish to work in the biotechnology industry or pursue graduate study in crop biotechnology.

Code	Title	Credits
BIOC 460	Foundations of Biochemistry and Molecular Biology I	3
PLSC 380	Principles of Plant Physiology	3
MATH 105 or MATH 146	Trigonometry Applied Calculus I	3-4
MICR 350 & 350L	General Microbiology and General Microbiology Lab	5
PLSC 453 or PLSC 431	Advanced Weed Science Intermediate Genetics	2-3
PLSC 484	Plant Tissue Culture and Biotechnology	3
Total Credits		19-21

Science Option - 30 Credits

For students interested in advanced study and want more foundation studies.

Code	Title	Credits
MICR 202 & 202L	Introductory Microbiology and Introductory Microbiology Lab	3
PLSC 380	Principles of Plant Physiology	3
CHEM 341 & 341L	Organic Chemistry I and Organic Chemistry I Laboratory	4
MATH 146	Applied Calculus I	4
PLSC 300-400	(No more than 2 credits of co-op may be used)	4
Science and Math Electives		12
Total Credits		30

Weed Science Option - 27-28 Credits

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

Code	Title	Credits
MICR 202 & 202L	Introductory Microbiology and Introductory Microbiology Lab	3
PLSC 380	Principles of Plant Physiology	3
CHEM 240 or BIOC 260	Survey of Organic Chemistry Elements of Biochemistry	3-4
MATH 103	College Algebra (or higher level)	3
PLSC 433	Weed Biology and Ecology	2
PLSC 453	Advanced Weed Science	2
ENT 431	Principles of Insect Pest Management	3
PPTH 454	Diseases Of Field and Forage Crops	3
SOIL 322	Soil Fertility and Fertilizers	3
Total Credits		25-26

Degree Requirements and Notes

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

Minor Requirements**Minor: Crop & Weed Science**

Minimum Required Credits: 18

Code	Title	Credits
Required		
PLSC 110	World Food Crops	3
PLSC 225	Principles of Crop Production	3
Elective Courses: Select two of the following:		6-7
PLSC 315 & 315L	Genetics and Genetics Laboratory (both must be taken to count as one selection)	
PLSC 320	Principles of Forage Production	
PLSC 323	Principles of Weed Science	
Elective Courses:		5-6
Other courses approved by the department:		
PLSC 215	Weed Identification	
SOIL 210	Introduction to Soil Science	
ENT 350	General Entomology	
PPTH 324	Introductory Plant Pathology	
PLSC 300-400	Level Course	
Total Credits		18-19

Minor Requirements and Notes

- A minimum of 8 credits must be taken at NDSU.
- Students must earn a minimum 2.00 GPA for the minor requirements.