

Agroecology, Horticulture and Environmental Quality

Crop & Weed Science Option

Why study crop and weed science?

Do you like to grow plants?

Do you want to use cutting-edge science to help plants grow healthier and more abundantly and to defend them against pests and poor growing conditions?

Do you care about protecting the environment and using natural resources efficiently?

Can you imagine yourself using computer models, satellites, lasers, gene manipulation, and other high-tech strategies to control plant pests?

Can you see yourself as a teacher or adviser, helping farmers to grow crops better and more profitably?

The **crop and weed science option** gives students the background to be successful in a wide range of crop-related careers, including cropping systems management, agricultural consulting, plant biotechnology, plant breeding and genetics, seed production and certification, weed science, and plant protection.

Program strengths/highlights

You can tailor your major to fit your interests and career goals. Basic and applied aspects of crop and weed science include agronomy, field crop production, plant breeding, plant genetics, plant physiology, weed science, plant pathology, and botany.

You will do an internship with a business or organization, testing your career goals and preparing yourself for the workplace, or do research with college faculty.

Faculty and facilities

The department has a range of greenhouses, as well as controlled environment facilities, available for student research, coursework, and hands-on training. The plant science farm near campus has plots available for research and for club activities.

Specialized clubs

Pursue your interest in growing horticultural or field crops in the Plant and Soil Science Club. You'll gain experience in greenhouse plant production, organization, and leadership. Activities include raising and selling poinsettias and spring bedding plants, field trips, working with the Idaho Nature Conservancy, and service projects.

Career opportunities

A degree in crop and weed science prepares you for careers in crop management or in the sciences of crop growth, development, and improvement.

Agricultural consultant—Give farmers recommendations for pest control and pesticide use, plant variety selection, and more.

Seed producer—Grow crop seeds, or have others grow it for you, and sell seed to farmers.

Farm manager—Oversee day-to-day farm operations, including chemical and fertilizer programs; irrigation; crop and harvest management; equipment upkeep, repair and diagnostics; employee scheduling; safety programs; inventory and shop maintenance; and fabrication, design, and installation of equipment/systems.

Crop adviser—Assist growers: recommend treatments for crop management, soil and water management, integrated pest management, and nutrient management.

Research technician—Assist an agronomist in implementing, maintaining, and quantifying research trials.

Grower—Be responsible for all stages of the production of a single crop, a portion of that crop, or many crops. Train workers and supervise crop production employees. Large firms have many growers.

Field representative—Work for a processing company, helping to ensure that contract growers produce an adequate supply of high-quality crops for processing. Advise growers on crop cultivars and field practices.

Farm chemical sales rep—Sell fertilizers, pesticides, and other chemical products to protect and improve plant growth.

Graduate school—Study at the M.S. or Ph.D. levels in agronomy, field crop production, plant breeding, plant genetics, plant physiology, and weed science.

“The PSES department is awesome because professors know you and care! At the same time, it's big enough to offer amazing opportunities and a variety of clubs to get involved in.” **Mary Barstow, crop science major**

University of Idaho

College of Agricultural and Life Sciences

www.cals.uidaho.edu/pses

Crop & Weed Science Option
4-year plan 2007-08

Fall			Spring		
Freshman					
Comm 101	Fund. of Public Speaking	2	Biol 115	Cells & Evolution of Life	4
CORE 103-149	Core Discovery	4	Chem 101	Introduction to Chemistry I	4
Engl 101	Basic Skills - Writing	3	CORE 153-199	Core Discovery	3
Math 143	Pre-Calculus Algebra & Analytic Geometry	3	Engl 102	Essay Writing	3
or Math 160	Survey of Calculus	4	Elective*	Specialization Course	3
PISc 102	Science of Plants in Ag	3			
TOTAL		15-16	TOTAL		17
Sophomore					
Elective*	Specialization Course	3	Biol 213	Prin. of Biol. Structure & Function	4
Chem 275	Carbon Compounds	3	or PISc 205	General Botany	4
Chem 276	Carbon Compounds Lab	1	MMBB 154/155	Intro. Microbiology/Lab	4
Soil 205	Soil Ecosystem	3	or MMBB 250/255	General Microbiology/Lab	5
Soil 206	Soil Ecosystem Lab	1	Stat 251	Statistical Methods	3
Elective	Core Cluster Course	3	Elective	Core Cluster Course	3
Elective	Ecology Elective	2-4	Elective ⁺	Crops Elective	3
TOTAL		16-18	TOTAL		17-18
Junior					
Ent 322	Economic Entomology	3	Gene 314	General Genetics	3
PISc 338	Weed Control	3	PISc 407	Field Crop Production	3
PISc 398	Internship	3	Elective**	Biotechnology Elective	3
or PISc 499	Directed Study	3	Elective	Core Cluster Course	3
PISc 415/416	Plant Pathology/Lab	4	Elective ⁺	Crops Elective	3
or Soil 425	Microbial Ecology	3	Elective	General Elective	3
Elective*	Specialization Course	3			
TOTAL		15-16	TOTAL		18
Senior					
Geog 385	GIS Primer	3	PISc 401	Plant Growth and Development	3
Engl 313	Business Writing	3	PISc 438	Pesticides in the Environment	3
or Engl 317	Technical Writing	3	Soil 446	Soil Fertility	3
MMBB 300	Survey of Biochemistry	3	Elective	Core Cluster Course	3
PISc 400	Seminar	1	Elective ⁺	Crops Elective	3
Elective ⁺	Crops Elective	3			
Elective*	Specialization Course	3			
TOTAL		16	TOTAL		15

Note: Course offerings may change from year to year. Always check the current course catalog.

* Specialization courses include any courses in accounting, animal and veterinary sciences, agricultural economics, biology, business, business education, business law, chemistry, computers, economics, entomology, foreign language (4 cr. max), forestry, landscape architecture, environmental science, molecular biology/biochemistry, physics, plant science, range or soils.

**For the biotechnology elective choose from AVS 488; Biol 212; Core 201 Biotech and Society; MMBB 450, 475, 487, 488, or PISc 433.

⁺ For the crops elective choose from these PISc courses: 308, 360, 401, 408, 410, 422, 433, 469, 480, and 490.

To learn more
Call toll free 1.88.88.UIDAHO
<http://www.uidaho.edu>

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