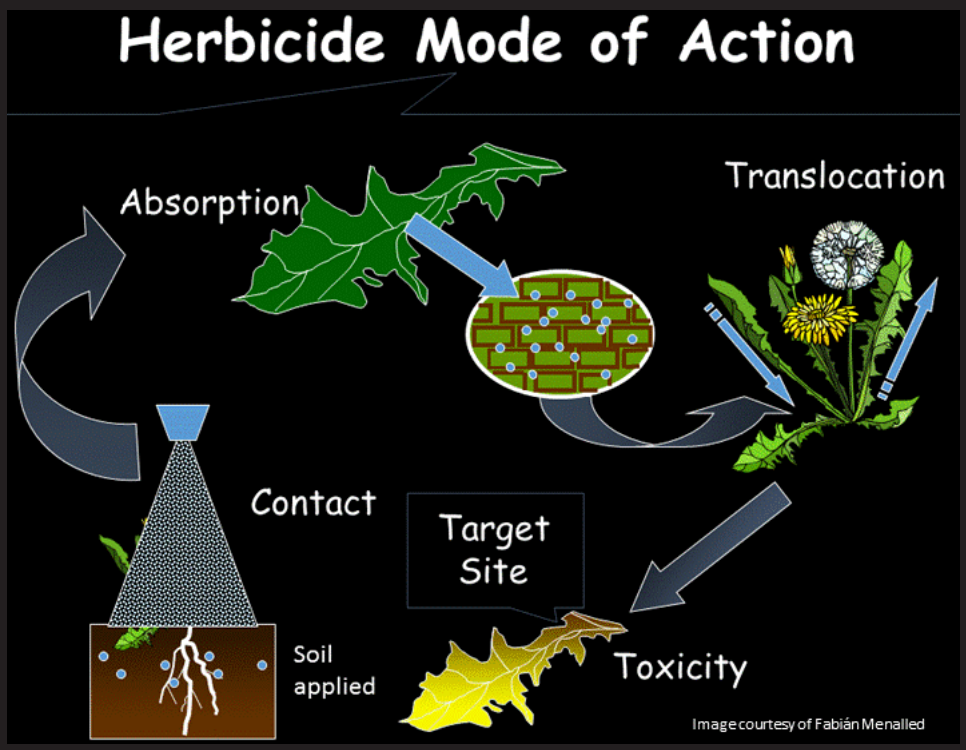
Montana State Online course — Fall 2016

100% online

Herbicide Physiology PSPP 546 • Aug. 29–Dec. 16, 2016



This course covers topics in herbicide classification, herbicide mode of action, and resistance mechanisms. The goals of the course are: to understand the fundamental physiology, biochemistry, and molecular biology of herbicides and their effects on plants; to study the physiological mechanisms of herbicide resistance; to examine the processes by which herbicides are discovered and developed for commercial release; and to investigate typical herbicide non-performance scenarios and practice troubleshooting field complaint situations.

Target Audience

Students from Weed Science, Plant Physiology, Plant Biology, Land Reclamation, Ecology, Range Science, Agronomy, Integrated Pest Management, and Conservation Biology will be served by this course. The course is designed for students without traditional access to this course material, and is not designed to replace existing, on-campus courses at other institutions.

Instructors include:

William Dyer is a professor, Plant Sciences and Plant Pathology, Montana State University. Dyer studies applied agricultural problems using molecular biology and genetics, seeking to understand the physiological strategies used by plants that are highly successful as weeds in agricultural settings.

Tracy Sterling is a professor and department head of MSU's Land Resources & Environmental Sciences (LRES) Department. Her weed physiology research centers on how environmental, insect, and herbicide stresses influence crop and weed productivity.

Sarah Ward is associate professor of plant genetics in the Department of Soil and Crop Sciences at Colorado State University, and a faculty affiliate in LRES at MSU. She is director of publications and a member of the executive committee of the Weed Science Society of America. A former plant breeder, Dr. Ward's research focuses on the genetics and population biology of weedy and invasive plants.

3 graduate credits

Prerequisites: Upper division courses in biochemistry (BCHM 340 General Biochemistry or equivalent) and plant physiology (PS 450 Plant Physiology or equivalent), or consent of the instructors.

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Full course description and tuition information:
http://bit.ly/PSPP546

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