WDS 4001 – Organic Weed Management
3 CREDITS
Spring Semester 2024
MWF Period 3, 9:35 to 10:25 AM
2316 Fifield Hall

INSTRUCTOR
Dr. Carlene A. Chase
1245 Fifield Hall
(352) 273-4770
Email: cachase@ufl.edu

OFFICE HOURS
Thursdays 10 am -12 pm or by appointment

COURSE DESCRIPTION

Ecological principles can be applied in agroecosystems to manage weeds sustainably. Nonchemical weed management approaches that utilize ecological processes detrimental to weeds and their propagules will be emphasized. Students will learn actively by critically analyzing pertinent literature and participating in discussions of supplemental reading, and by engaging in data collection and interpretation of weed management research results.

LEARNING OBJECTIVES

Upon successful completion of this course, students will be able to:
- Describe how ecological approaches can be utilized to manage weeds in a sustainable manner
- Select and recommend ecological weed management practices that are approved for use in organic cropping systems
- Critically analyze and discuss weed science journal articles
- Prepare a laboratory report based on a field or greenhouse weed science experiment.

PREREQUISITE

HOS 3020C - Principles of Horticultural Crop Production, ALS 3153 Agricultural Ecology or equivalent.

TEXTBOOKS: There is no required textbook.

Recommended Texts

Hatcher, P.E. and R.J. Froud-Williams. 2017. Weed Research: Expanding Horizons. John Wiley & Sons, Hoboken, NJ.

Liebman, M., C.L. Mohler, and C.P. Staver. 2001. Ecological Management of Agricultural Weeds. Cambridge University Press, Cambridge.

Mohler, C.L., J.R. Teasdale, and A. DiTommaso. 2021. Manage Weeds on Your Farm: A Guide to Ecological Strategies. SARE Outreach. https://www.sare.org/resources/manage-weeds-on-your-farm/.

Upadhyaya, M.K. and R.E. Blackshaw. 2007. Non-chemical Weed Management: Principles, Concepts and Technology. CABI, Wallingford.

Zimdahl, R.L. 2018. Fundamentals of Weed Science. Academic Press. Cambridge, MA.

Supplemental Materials

Booth, B.D., S.D. Murphy, and C.J. Swanton. 2010. Invasive plant ecology in natural and agricultural systems. Second edition. CABI Publishing.

Bowman, G. 2001. Steel in the field: a farmer's guide to weed management tools. Sustainable Agriculture Network, Beltsville.

Chauhan, B.S. and G. Mahajan. 2014. Recent Advances in Weed Management. Springer, New York Heidelberg Dordrecht London.

Håkansson, S. 2003. Weeds and weed management on arable land: an ecological approach. CABI Publishing.

Radosevich, S.R., J.S. Holt, and C.M. Ghersa. 2007. Ecology of Weeds and Invasive Plants: Relationship to Agriculture and Natural Resource Management, 3rd Edition. John Wiley & Sons, New York.

Ross, M.A. and C.A. Lembi. 2008. Applied Weed Science: Including the Ecology and Management of Invasive Plants. Prentice Hall, Upper Saddle River.

COURSE GRADE

Assignment	Points
Examinations: Three examinations, essay type and short answer responses.	500
Quizzes: Students will complete quizzes based on journal articles assigned for discussion.	200
Discussion Moderation: Students working in groups or 2-3 will select a journal article on a weed management topic to be read by the class. The group will design a presentation or class exercise that will promote discussion of the article by the class during a designated class period.	100
Laboratory report: Students will prepare a laboratory report based on a field or greenhouse weed science experiment. The report will include: title, objective, procedure, results and discussion, and references (Minimum of 5).	200
TOTAL	1000

GRADING SCALE

Score	Percent	Grade
900 to 1000	90 to 100	A
850 to 899	85 to 89.9	B+
800 to 849	80 to 84.9	B
750 to 799	75 to 79.9	C+

700 to 749	70 to 74.9	C
650 to 699	65 to 69.9	D+
600 to 649	60 to 64.9	D
0 to 599	0 to 59.9	E

Additional information on current UF grading policies for assigning grade points can be found here:

- *Grading policy*, https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/.

COURSE POLICIES

Attendance and Make-up Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

- *UF Attendance policy*, https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://policy.ufl.edu/regulation/4-040/) specifies a number of behaviors that are in violation of this code and the possible sanctions. *This includes language on the improper use of a Chatbot and/or an artificial intelligence tool (termed Entity in the Honor Code).* Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures
without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken when appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:
http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html.

Campus Resources

Health and WellnessU Matter We Care: If you or a friend is in distress, please contact https://umatter.ufl.edu/ or 352 392-1575 so that a team member can reach out to the student.

- *Counseling and Wellness Center*: http://www.counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.
- *Student Health Care Center:* Call 352-392-1161 for 24/7 information to help you find the care you need or visit https://shcc.ufl.edu/.
- *University Police Department*: 392-1111 (or 9-1-1 for emergencies), www.police.ufl.edu.
- *UF Health Shands Emergency Room / Trauma Center:* For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; https://ufhealth.org/uf-health-shands-emergency-room-trauma-center.
- *GatorWell Health Promotion Services:* For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit https://gatorwell.ufsa.ufl.edu/ or call 352-273-4450.

Academic Resources

- *E-learning technical support*: Contact the UF Computing Help Desk (https://helpdesk.ufl.edu/, 352-392-4357 or via e-mail at helpdesk@ufl.edu).
- *Career Resource Center*: Reitz Union, Suite 1300, 352-392-1601. Career assistance and counseling. https://career.ufl.edu/.
- *Library Support*: Various ways to receive assistance with respect to using the libraries or finding resources. https://uflib.ufl.edu/. Marston Science Library: https://marston.uflib.ufl.edu/.
- *Teaching Center*: 1317 Turlington Hall, 352-392-2010 or via email at teaching-center@ufl.edu. General study skills and tutoring. https://umatter.ufl.edu/office/teaching-center/.
- *Writing Studio*: 2215 Turlington Hall, 352 846-1138. Help with brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.
- *Student Complaints*: https://em.ufl.edu/complaint.