



South Portland, Maine 04106

HORTICULTURE

CourseTitle:	Integrated Pest Management	Credit Hours: 3
Catalog Number:	HORT 140	Hybrid Course
Total Contact Hours	64; Lecture: 32 hrs. Lab 32 hrs.	
Instructor Cheryl Rich, M.S.		

COURSE SYLLABUS Spring '16

	<u>HORT 140-11</u>	<u>HORT 140-21</u>
Lecture:	1 hour equivalent online	1 hour equivalent online
Lecture:	Thursdays 1:30 - 2:20	Wednesdays 9:00 - 9:50
Lab:	Thursdays 2:30 - 4:20	Wednesdays 10:00 - 11:50

Instructor: Cheryl Rich, M.S.
Office: 741-5780
FAX: 741-5628
Email: crich@smccME.edu
Office hours: Mondays 10:00-noon
Tuesdays 1:30-3:30 pm
Wednesdays 1:30 – 3:30 pm
Fridays By appointment only

My office is located in the Horticulture Building and my schedule is posted on my door. Feel free to call, email, stop in, or leave me a note (email is best). For lengthy meetings, please make an appointment.

Course Description

This course introduces the student to applied entomology, plant pathology, and pest management strategies using the principles of Integrated Pest Management (IPM) and Plant Health Care (PHC). Common insect and plant disease organisms are identified and discussed. Emphasis is placed on plant health and pest management tactics resulting from systematic, logical, effective, and environmentally safe management decisions. Preparation for the Maine Board of Pesticides Control Private Applicator's license is provided. This is a *hybrid course*. The equivalent of one hour of weekly lecture material and corresponding assignments will be delivered in an on-line format, utilizing Blackboard®. In order to complete this course successfully, students will be required to attend classroom lectures and labs and fulfill on-line responsibilities.

Important Scheduling Information: The Horticulture Department's classes end the week ending April 22. In order to fulfill the required number of contact hours for each of our spring courses, Horticulture students will have academic responsibilities during SMCC's spring break (the week of March 9-15). All students enrolled in Horticulture classes will be expected to attend a 3day / 2 night field trip from Tues. March 15 to Thurs. Mar. 17to Washington D.C., where we will visit US Botanic Garden and the National Arboretum. Students should make every effort to attend. If you are unable to go, please notify your instructor as soon as possible, and you

will be provided with an alternative assignment to complete. More specific details about the field trip will be provided as they become available. Students with poor attendance and / or poor academic standing in this course will not be eligible to participate in this trip, and will be required to complete an alternative assignment.

Course Objectives

After completing this course, the student will be able to:

1. describe and discuss basic biology, behavior, and ecology of selected insects and related arthropods
2. describe and discuss the interactions between plant disease organisms and plants
3. apply the principles of Integrated Pest Management (IPM) as they relate to the production and care of horticultural crops, and the maintenance of healthy landscapes
4. apply the principles of Plant Health Care (PHC) as a means of producing healthy horticultural crops and creating healthy, sustainable landscapes
5. differentiate between beneficial and pest organisms
6. discuss the importance of timing and monitoring as they relates to control of plant pests and diseases
7. describe, discuss, and prescribe natural and biological controls as a means of reducing pest and disease problems in horticultural crops and in landscape settings
8. prescribe environmentally safe methods to manage landscape and greenhouse insect, disease, and weed problems with respect to economic and aesthetic threshold levels.
9. describe and discuss various management strategies for common vertebrate pests
10. devise and implement IPM and PHC strategies that recognize and honor the importance of balance to any healthy system
11. discuss the laws and regulations governing the use of pest, disease, and weed control products in the Maine, and access current information concerning such products and their use.
12. successfully complete the Maine Board of Pesticides Control private applicator's exam.

Topical Outline of Instruction (sequence may vary)

- Introduction: What are IPM and PHC?
- History and theory of IPM
- Review: plant structure and function
- Arthropoda
 - Major pest and beneficial orders
 - Basic anatomy and keys to identification
 - Life cycle
- Scouting and monitoring techniques and strategies
 - Timing
 - Life cycle
 - Growing degree days and phenology
 - Decision making
 - Economic thresholds
 - Aesthetic thresholds
- Plant diseases and disorders
 - Biotic or abiotic?
 - Common pathogens
 - Biology, structure, and keys to identification
 - Life cycles
 - Symptoms and signs
- Plant pest and disease management strategies

Course Requirements

Quizzes	20 pts each	Anticipate weekly reading / lecture quizzes. Make-up quizzes will not be given unless arrangements are made in advance, or in the event of extraordinary circumstances and at the instructor's discretion.
Labs / homework	20 pts each	Unless otherwise specified, lecture assignments will be due at the beginning of the next lecture, and lab assignments will be due at the beginning of the next lab. Late submissions will be penalized 1 point (5%) per day, and will not be accepted after one week, except under extraordinary circumstances and at the instructor's discretion.
Mid Term	100 pts	Mid term is scheduled for the Mar. 2/3
Projects	80 pts	(4 at 20 pts ea. Project will be discussed in greater detail at a later date)
Final	100 pts	Final exam is scheduled for Apr. 20/21, time TBA.
And MBPC exam		Final exam is cumulative. Final exam score will include the result of the MBPC private applicator exam (20%), unless the state is unable to return the scores in time, in which case final exam score will be based on final exam only.

Some lab exercises will require students to be outside. Students will be notified one week in advance. Students should dress appropriately for such activities.

Grading

A student's grade will be determined by dividing the total number of points earned by the total number of points assigned. Letter grade translations are provided below. This means that if a student earns 512 of 600 possible points, he or she has earned 85.3% of the points assigned. Semester grade is then a B.

93-100	A	73-76	C
90-92	A-	70-72	C-
87-89	B+	67-69	D+
83-86	B	63-66	D
80-82	B-	60-62	F
77-79	C+		

Attendance

Regular attendance is essential to success in this course. Missing more than 2 classes will result in a 5 point deduction from your final semester grade percentage for each subsequent absence. No make ups will be given for tests, quizzes, or labs missed due to an unexcused absence. If regular attendance is going to be a problem, make an appointment with Cheryl to discuss your future in this class.

Text and supplies

Required: Cranshaw, Whitney. *Garden Insects of North America*. Princeton, NJ: Princeton University Press, 2004.
Brown, C. L. and Hock, W. K., eds. *Pesticide Education Manual*. University of Maine Cooperative Extension, 2006. (Available on Blackboard® or as a free PDF emailed from the MBPC)

10x Hand Lens

TIPS FOR SUCCESS IN THIS COURSE:

- Attend all lectures and labs
- Stay current with reading; try to have the week's reading assignments done before class
- Try to have your online assignments completed before our classroom meetings.
- Complete and submit all assignments on time; pay close attention to Blackboard® due dates.
- Take *efficient* lecture notes. Revisit notes immediately after class to fill in and clarify as needed
- Print Powerpoint lecture handouts before class lectures, and utilize for efficient notetaking.
- Take accurate and efficient reading notes. You'll be responsible for information presented in reading assignments even though the topics may not be directly addressed in lectures.
- Ask questions in class—you're probably not the only one needing clarification
- Utilize *all* of lab time to complete lab assignments. This time is already scheduled into your day.
- Prepare flash cards for difficult terminology and review them often
- Review lecture notes, reading notes, Powerpoint presentations, and labs before quizzes and exams
- Be organized: keep all returned work for review
- **Budget 4-6 hours per week to study and assignment completion for this course**
- Form a study group
- Need help with course content? See Cheryl.
- Need help with study skills, test taking skills, or time management? Visit the *Academic Achievement Center* in the Campus Center building.

ADA Statement

Southern Maine Community College is an equal opportunity/affirmative action institution and employer. For more information, please call 207-741-5798.

If you have a disabling condition and wish to request accommodations in order to have reasonable access to the programs and services offered by SMCC, you must register with the disability services coordinator, Sandra Lynham, who can be reached at 741-5923. Further information about services for students with disabilities and the accommodation process is available upon request at this number.

Add-Drop / Withdrawal Policy

A student who drops a course within the first calendar week that the course meets may receive a 100% refund of tuition and technology fee for the course.

A student may withdraw from a course and a "W" will be shown on the transcript indicating an uncompleted course when the student meets the following criteria:

1. The student must withdraw from a five-week course by the end of the second calendar week that the course meets.
2. The student must withdraw from a ten-week course by the end of the third calendar week that the course meets.
3. **The student must withdraw from a fourteen-week course (Horticulture Department) by 5 p.m on Wednesday, Mar. 30.**

Students should be aware that **no refund is given when a student withdraws** from a course.

Specific dates for add / drop, withdraw, etc. are provided on the academic calendar, found in the College Catalog, which is available in print and on-line. A link to the catalog can be found on the SMCC home page at <http://www.smccme.edu>

The student must complete and submit a withdrawal form available from Enrollment Services. Failure to complete and submit the withdrawal form before the end of the withdrawal period shall constitute an administrative failure, with an "AF" shown on the transcript.

SMCC Plagiarism Statement

Adherence to ethical academic standards is obligatory. Cheating is a serious offense, whether it consists of taking credit for work done by another person or doing work for which another person will receive credit. Taking and using the ideas or writings of another person without clearly and fully crediting the source is plagiarism and violates the academic code. If it is proven that a student in any course in which s/he is enrolled has knowingly committed such a violation, appropriate action will be taken which may result in suspension from the course and a failing grade in the course. Students have the right to appeal these actions to the Dean of Students under the terms outlined in the Student Code of Conduct. For more information consult the Student Handbook.