

**Bergen Community College**  
**Division of Mathematics, Science & Technology**  
**Department of Biology and Horticulture**

**Fundamentals of Horticulture (HRT-101)**

**General Course Syllabus**

**Revised: Summer 2015**

**Semester and Year:**

**Section Number:**

**Meeting Times & Locations:**

**Instructor:**

**Office Location:**

**Phone:**

**Office Hours:**

**Email Address:**

**Course Description:** **HRT 101 Fundamentals of Horticulture** is designed to acquaint the student with the multi-faceted field of ornamental horticulture. Topics for examination include the historical role of horticulture from the artistic and scientific perspectives, as well as its commercial and aesthetic significance and applications for the future. Discussion of current employment opportunities, trends and practices will be emphasized. Noted guest lecturers from all fields of horticulture will share their views and experiences.

**Prerequisites:** None

**General Education Course:** No

**Course Credits:** 3.0

**Hours per Week:** 5.0: 2 hours lecture and 3 hours lab

**Course Coordinator:** Dr. Steven Fischer

**Required Text:** None; all materials will be provided in print or as online links.

**Supplementary Text:** None

**Required Laboratory Manual:** You will need to provide: a class binder for handouts and notes, estimate a 2.5"-3.0" binder; a separate class binder for your lab notebook, estimate a 0.5"-1" binder.

**Supplementary Materials:** Minimal, as noted for projects

**Student Learning Objectives:**

**The student will be able to:**

1. Identify the career fields that comprise the art and science of Horticulture. Assessment will be based on performance on exam questions, projects and class discussions.
2. Define science and Horticulture and describe their impact on society. Assessment will be based on performance on exam questions, projects and class discussions.
3. Participate in hands-on lab activities that will introduce students to selected fields of Horticulture. Students will be evaluated by performance in the laboratory, greenhouse or landscape.
4. Describe the techniques and recall the technology used in select fields of Horticulture. Assessment will be based on performance on exam questions, projects and class discussions.

5. Use the scientific method to analyze a problem and draw conclusions from the data. Students will be evaluated by performance in the laboratory, greenhouse or landscape.
6. Identify the historical foundations of Horticulture and their relevance to current career opportunities. Assessment will be based on performance on exam questions, projects and class discussions.
7. Explain the fundamental principles of plant growth and development. Assessment will be based on performance on exam questions, projects and class discussions.
8. Recognize the evolution, diversity and classification of the plant kingdom. Assessment will be based on performance on exam questions, projects and class discussions.
9. Recall the mechanisms of growth and development and the effects of hormones and growth regulating substances. Students will be evaluated by their performance on exam questions, projects and class discussions.
10. Define terms and important features of different fields of Horticulture. Assessment will be based on performance on exam questions, projects and class discussions.
11. Recognize the triple-bottom line for Horticulture – economic (profit for businesses), social (community service) and environmental (sustainability). Assessment will be based on performance on exam questions, projects and class discussions.
12. Research projects individually and as teams, using electronic and written sources. Demonstrate a command of the information, ability to think critically and evaluate the importance to society. Assessment will be based on a written paper, oral presentation or creation of an equivalent project.

### **Course Content Schedule:**

#### **WEEK #**

#### **LECTURE/LAB SCHEDULE**

1	Scope of the Course; Introductions, Scope of the Course; Local to Global - the Diversity of Plants
2	Careers in Horticulture, Agriculture, and the Future of People & Plants - Production & Service Industries Scientific & Management
3	History of the Greenhouse and Growing Structures Historical Perspective of Horticulture Overall; Controlling the Plant Environment (light, humidity, water, temperature, etc.)
4	The Nursery Industry – Woody & Tropical; Lab on cuttings and grafting (Interiorplantscaping) Biology of Horticulture
5	The Floriculture Industry (growers, local & global production, distribution); Hillcrest Gardens field trip – bedding plants, orchids Soil Science, Plant Nutrition and Water Science
6	Soilless Mixes & Growth Regulators; Lab on seeding and seedling nutrition Plant Growth and Development; Directing Plant Growth
7	Pruning – Who, What, When, Where, Why, How; Lab - hands-on pruning Plant Breeding and Propagation
8	Garden Design – Elements and Principles; Lab – scale drawing and “the backwards process”

	How Does Aesthetics Relate to Plant Functions?
9	Floral Designs for Everyday Life – examples in soap operas Interacting with Plants in Outside in Parks and Landscapes
10	Lawns – a Blessing or a Curse? What you want in a lawn and what you don't. Climate, Weather and Seasonal Effects on Plants
11	IPM, PHC and Best Horticultural Practices Citizen Science and Horticulture
12	Ethics and Horticultural Practices; Why to and why not to. Plant Conservation and the Triple Bottom Line
13	Student Presentations on a “Pet Project” Student Presentations
14	Open Discussion on the Quality of Life, Sustainability Factors Facing Humankind Open Discussion and Presentations
15	Summary of Course & Celebration Week; Planting the Garden with Pride! Summary and Celebration

**Dates and schedule are approximate and are subject to change at the discretion of the professor.**

**Student Assessment Tools:**

The above student learning objectives will be generally assessed or evaluated by instructors using a variety of **assessment instruments** including **lecture exams, laboratory exams, quizzes, laboratory reports, written reports, presentations, projects, etc.** The decisions concerning the type or types and number of instruments that are used in a specific section of the course will be left to the instructor of that section. This information, when given by the instructor should be recorded by the student in the **Student Assessment Section** of this document.

**Faculty Addenda:**

**Lecture Attendance:**

**Lab Attendance:**

**Policy Concerning Late Assignments:**

**Policy Concerning Make-Up Testing:**

**Safety Information:**

**Other Class Policies:**

**Student Assessment:**

**Lecture Examinations %**

**Laboratory Component %**

**Student Project/Report %**

**Class Participation %**

**Other %**

**Total 100%**

**If you have a medical condition or develop a medical condition during this semester, which prevents you from fulfilling the requirements of this course, you must notify your physician. You and your physician must decide whether or not it is appropriate for you to remain in this course. If the decision is to remain in this course, please obtain a letter from your physician indicating that your continued participation in this course is appropriate and present it to the Department Chair.**

### **College Policies:**

#### **Student Responsibility**

Students will be held responsible for reading all pertinent information in college publications regarding withdrawals, course drops, college deadlines, and tuition refunds. Students are responsible for compliance with the rules and regulations as stated in college publications.

#### **Absence of Instructor**

Students are expected to wait twenty minutes for a faculty member to come to class. If at the end of twenty minutes, the faculty member does not come, the students should sign an attendance sheet, which indicates the course, date, and time. A student should deliver the attendance sheet to the divisional office (A304) if between 9:00 a.m. and 5:00 p.m. or to the Evening Office (C107) if before 9:00 a.m. or after 5:00 p.m. Students cannot be penalized by faculty for not waiting longer than twenty minutes.

#### **Academic Dishonesty and Plagiarism**

Bergen Community College is committed to academic integrity – the honest, fair and continuing pursuit of knowledge, free from fraud or deception. Students are responsible for their own work. Faculty and academic support services staff will take appropriate measures to discourage academic dishonesty. **Plagiarism** is a form of academic dishonesty and may be a violation of U.S. Copyright laws. Plagiarism is defined as the act of taking someone else's words, opinions, or ideas and claiming them as one's own. **Consequences of Violations Academic Integrity**

##### **A. Instructor's Sanctions for a Violation**

The faculty member will determine the course of action to be followed. This may include:

- Assigning a failing grade on the assignment;
- Assigning a lower final course grade;
- Failing the student in the course
- Other penalties appropriate to the violation;

In all cases, the instructor shall notify the Vice President of Student Services of the violation and the penalty imposed. The student has the right to appeal the decision of the instructor to the appropriate department head.

##### **B. Institutional Sanctions for Violations**

When a violation of academic integrity has been reported regarding a student, the Vice President of Student Services may impose disciplinary penalties beyond those imposed by the course instructor, which may include suspension or dismissal from the College. The student shall have the right to a hearing before the Vice President of Student Services or a designated judicial affairs committee. Judicial procedures governing violations of academic integrity are contained in the student handbook.

#### **Class Attendance**

All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

#### **Eating and Drinking**

Eating or drinking in classrooms, lecture rooms, laboratories, gymnasium, swimming pool, or passageways is forbidden. Covered beverages only are permitted in the library. Eating and drinking are permitted in cafeteria and vending areas only.

#### **Learning Assistance**

##### **Henry and Edith Cerullo Learning Assistance Center**

The Tutoring Center, English Language Resource Center, Math Walk-In Center and Writing Center are collectively known as the Henry and Edith Cerullo Learning Assistance Center. The Cerullo Learning Assistance Center is located in the Pitkin Education Building, in Room L-125. The telephone number is (201) 447-7489. The Learning Assistance Center, staffed with peer and professional tutors, offers free individual and group tutoring, supplemental instruction, and online tutoring for subjects offered at the College. The Center provides alternative approaches to

problem solving and organizational skills. Tutors help clarify classroom lectures and textbooks and help students prepare for exams. These services build student self-confidence and reduce fear of failure. The Center is equipped with the latest technology and software, including tapes, books, review sheets, exercises and software.

### **Services for Students with Disabilities**

The Office of Specialized Services/ Deaf Services, located in L-115 in the Pitkin Education Center provides accommodations and auxiliary services to students with disabilities attending Bergen Community College. Students are encouraged to submit documentation to OSS during the early stages of the admission process. The suggested deadlines for submitting documentation are as follows: August 1st for fall semesters, December 1st for spring semesters. For more information please contact our office at 201-612-5270 or at [www.bergen.edu/oss](http://www.bergen.edu/oss).

### **Sidney Silverman Library**

Main Building, Pitkin Education Center, L-wing, 2nd Floor

Paramus Library Hours: (201) 447-7131 or visit <http://www.bergen.edu/library/calendar/gcal.htm>

Paramus Service Desk: (201) 447-7970

Meadowlands Location: 1280 Wall Street, Lyndhurst 2nd Floor

Meadowlands Library Hours: <http://www.bergen.edu/library/calendar/gcal.htm>

Meadowlands Service Desk: (201) 301-9692

[www.bergen.edu/library](http://www.bergen.edu/library)

### **Testing Services**

The Bergen Community College Office of Testing Services (OTS) is located in Room S-127. OTS serves the college community by identifying, developing, procuring, administering, processing, and/or evaluating examinations, which meet a variety of administrative and instructional needs. To contact the OTS, please call (201) 447-7202. The Office of Testing Services administers makeup tests as a service for students who, for compelling and exceptional reasons, have missed a scheduled classroom examination. Students must receive prior permission from and make arrangements with their course instructors to take these examinations, under specific conditions, in the Office of Testing Services, Room S-127.

### **WebAdvisor**

WebAdvisor is a web interface that allows students to access information contained in Datatel's Colleague, the administrative database used by Bergen Community College. Students may use WebAdvisor to register for classes, to pay tuition and fees, to view their class schedules, to check grades, to check on progress toward degree requirements, etc. WebAdvisor accounts are available for all students enrolled in credit programs. New students are strongly encouraged to attend an in-person registration or advisement session before using a WebAdvisor account. Eligible students without WebAdvisor user names and passwords may access their WebAdvisor account by going to [go.bergen.edu](http://go.bergen.edu) and selecting "I'm new to WebAdvisor." Then, follow the on-screen directions. Check the WebAdvisor FAQ for answers to common questions, such as how to reset your password. Students must have a valid e-mail address on file with the College to use WebAdvisor.