

## **Introduction to Horticulture**

11:776:211 (3 credits)  
Fall Semester (yearly)

### **CONTACT INFORMATION**

Instructor: Dr. Thomas Gianfagna  
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Office Hours: by e-mail appointment

Teaching Assistant: Nicoletta Graf  
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E-mail: nmgraf@rci.rutgers.edu  
Office Hours: by e-mail appointment

### **COURSE DESCRIPTION**

This lecture and laboratory course teaches the art and science of horticulture, emphasizing the scientific, technological, and industrial aspects of horticultural principles and practices.

### **COURSE WEBSITE, RESOURCES AND MATERIALS**

- Course website: Sakai. Presentations on all topics in class, including those of invited experts, will be posted on Sakai for student use
- Supplemental materials will be provided as needed or placed on reserve at Chang Library.

### **PREREQUISITE**

None

### **COURSE LEARNING GOALS**

(Link to Plant Biology Undergraduate Program Goals: <http://plantbiology.rutgers.edu/undergrad/plantbiology/>)

By the end of this course, the student will be able to:

1. To define and categorize horticultural crops (addresses program learning goal 1)
2. To understand how environmental factors affect horticultural crop production (addresses program learning goal 2)
3. To become familiar with the most important horticultural practices and be able to explain their underlying principles (addresses program learning goal 1)

## ASSIGNMENTS/RESPONSIBILITIES AND ASSESSMENT

### Grading

- Three exams: one-third of course material each. Material from field trips and greenhouse experiments will be covered on the exams.

Grades will be classified based on Rutgers approved system: A, B+, B, C+, C, D, and F.

**Learning goals assessment:** Specific questions on exams will be used to assess student knowledge of course learning goals, including demonstrated mastery of fundamental terms, horticultural principles, and practices.

## PARTICIPATION GRADE AND ABSENCE POLICY

Class participation and attendance at all field trips is required in this course. A student may miss up to a maximum of three classes without special permission or reason. Any subsequent absences without a reason attested by a recognized Rutgers authority will attract penalty (up to a maximum of 10% of the total score for the course).

Students who expect to miss more than three classes may use the University absence reporting website (<https://sims.rutgers.edu/ssra/>) to indicate the date and reason for the absence. An e-mail is automatically sent to the instructor.

## COURSE SCHEDULE

| Session | Topic   |
|---------|---|
| 1       | Introduction, History and Geography of Horticulture           |
| 2       | Horticultural Taxonomy, IFNH Living Wall                      |
| 3       | Plant Structure and Development                               |
| 4       | Plant Physiological Processes, Fall Vegetable Garden          |
| 5       | Environmental Factors and Plant Growth – 1                    |
| 6       | Field Trip: Vegetable Research (67 Ryders Lane)               |
| 7       | Environmental Factors and Plant Growth – 2                    |
| 8       | Seedage and Asexual Propagation – T. Molner                   |
| 9       | <b>Exam I</b>   |
| 10      | Field Trip: Rutgers Gardens (112 Ryders Lane)                 |
| 11      | Plant Breeding and Genetics J. Goffreda                       |
| 12      | Plant Tissue Culture and Propagation – T. Curry               |
| 13      | Plant Growth Regulators                                       |
| 14      | Soils and Mineral Nutrition                                   |
| 15      | Turfgrass Management  |
| 16      | Field Trip: Rutgers Turfgrass Research Farm (102 Ryders Lane) |
| 17      | Pruning Trees and Shrubs                                      |
| 18      | Complete Plant Propagation and Plant Nutrition Experiments    |
| 19      | Interior Plants   |
| 20      | <b>Exam II</b>  |

| <b>Session</b> | <b>Topic</b>                               |
|----------------|--|
| 21             | Horticultural Therapy and Medicinal Plants |
| 22             | Floral Design                              |
| 23             | Tropical Horticultural Crops               |
| 24             | Post-Harvest Pathology and Physiology      |
| 25             | Plant Pests and Diseases                   |
| 26             | Orchid Production                          |
| 27             | Greenhouses – J. Florentine                |

**Exam III (final exam: to be determined)**

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### **FINAL EXAM/PAPER DATE AND TIME**

A comprehensive final exam will be offered but it is optional. If the student elects to take the final, it will be worth 40% of the course grade. The Online Final exam Schedule: <http://finalexams.rutgers.edu/>

### **ACCOMODATIONS FOR STUDENTS WITH DISABILITIES**

Please follow the procedures outlined at <https://ods.rutgers.edu/students/registration-form>. Full policies and procedures are at <https://ods.rutgers.edu/>

### **ACADEMIC INTEGRITY**

The university's policy on Academic Integrity is available at <http://academicintegrity.rutgers.edu/>

The principles of academic integrity require that a student:

- Properly acknowledge and cite all use of the ideas, results, or words of others.
- Properly acknowledge all contributors to a given piece of work.
- Make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- Obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- Treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- Uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that:

- Everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- All student work is fairly evaluated and no student has an inappropriate advantage over others.
- The academic and ethical development of all students is fostered.
- The reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

## STUDENT WELLNESS SERVICES

**Just In Case Web App** <http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

### **Counseling, ADAP & Psychiatric Services (CAPS)**

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 / [www.rhscaps.rutgers.edu/](http://www.rhscaps.rutgers.edu/)

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

### **Violence Prevention & Victim Assistance (VPVA)**

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / [www.vpva.rutgers.edu/](http://www.vpva.rutgers.edu/)

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

### **Disability Services**

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

### **Scarlet Listeners**

(732) 247-5555 / <http://www.scarletlisteners.com/>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.