

ARBORICULTURE

Course Number: 11:216:365 Fall 2024

Prerequisites or Co-requisites:

 01:119:116 General Biology 2 AND (01:640:135 Calculus 1 for the Life and Social Sciences OR 01:640:151 Calculus 1 for the Mathematical and Physical Sciences)

Meeting Days and Times:

Lecture: 2:00 – 3:20 pm Tuesdays and Thursdays, Waller Hall Room 108A

• Lab: 3:50 – 6:50 pm Tuesdays, Waller Hall Room 108A and outside around campus

CONTACT INFORMATION:

Instructor: Dr. Allyson Salisbury
Office Location: (Old) Blake 102
Email: asalis@sebs.rutgers.edu

Office Hours: By appointment for zoom or in-person

COURSE WEBSITE, RESOURCES AND MATERIALS:

- The course will be managed on Canvas
- Textbook: Applied Tree Biology by Andrew Hirons (NOTE: this textbook can be accessed online for free via the RU library)

COURSE DESCRIPTION:

Arboriculture is the science and art of caring for individual trees from cultivation to planting to management to removal for the benefit of society. In this course, we will learn about modern tree care practices and the biology that guides them. We apply those practices over the course of a semester long project to generate an evaluation report for a set of campus trees. At the end of this course, you should feel confident to apply for a job in the tree care industry and to prepare for taking the International Society of Arboriculture's arborist certification exam.

ECOLOGY, EVOLUTION, AND NATURAL RESOURCES PROGRAM LEARNING GOALS:

- Goal 4: Effectively utilize software, hardware, field, and laboratory techniques commonly used in the study of ecology, evolution, and natural resource management.
- Goal 6: Communicate effectively orally and through written text and graphics.
- Goal 10: Apply a fundamental knowledge of tree biology and professional ethics to tree care management and practice.

COURSE LEARNING GOALS:

1. Understand fundamental aspects of the professional tree care industry, including the role of professional ethics in tree care.



- 2. Apply their knowledge of tree biology and the abiotic environment to inform tree care management and practice care following industry safety standards.
- 3. Use organized methods of observations to critically evaluate planting sites trees in all life stages for landscape management and safety.
- 4. Develop and defend bid specifications and summary reports of tree conditions based on industry standards and best management practices.

Society of American Foresters Curriculum Criteria: A2, A3, C7, C9, D1, D2, D3, D4, D5, D6, D14

ASSIGNMENTS/RESPONSIBILITIES, GRADING & ASSESSMENT:

QUIZZES (20% of total grade)

There will be 10 quizzes over the course of the semester. Quizzes will test key vocabulary and concepts. They will contain questions similar to those found in the ISA certification exam.

ATTENDANCE (20% of total grade)

Attendance in lecture and labs is required. This course is designed to be highly interactive and by attending class you will learn not just from me, but from your classmates. Plus, we get to learn from you as well. Attending class and lab also give you the opportunity to practice the skills this class is intended to develop in a supervised and collaborative setting. If you expect to miss one or two classes, please use the University absence reporting website https://sims.rutgers.edu/ssra/ to indicate the date and reason for your absence. An email is automatically sent to me.

CAMPUS TREE REPORT (Individual components: 40% of final grade (5% for each part). Final complete report (10% of final grade). Final presentation (10% of final grade).

You will choose a set of trees on Cook/Douglass Campus to evaluate and generate arborist report them. Your report will be composed of 8 components which will be individually submitted over the course of the semester. At the end of the semester, you will submit all of the components with a cover letter as a complete package as though you were submitting a report to client. Then at the end of the semester you will give a short presentation about the trees you evaluated.

SCORING

A: 90 and above

B+: 87-89 B: 80-86 C+: 77-79

C: 70-76 D: 60-69

F: 59 and below



COURSE SCHEDULE

The course schedule is posted on Canvas and may be updated periodically.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

The Office of Disability Services works with students with a documented disability to determine the eligibility of reasonable accommodations, facilitates and coordinates those accommodations when applicable, and lastly engages with the Rutgers community at large to provide and connect students to appropriate resources. Please follow the procedures outlined at https://ods.rutgers.edu/students/getting-registered. Full policies and procedures are at https://ods.rutgers.edu/

LATE WORK

All work is due at midnight on Canvas the day it is due, unless otherwise specified. Work turned in after that time will be considered a day late. Late work receives a 10% deduction of the points attainable per day (including weekends and holidays). Therefore, work more than 10 days late will be worth zero points.

ACADEMIC INTEGRITY

The university's policy on Academic Integrity is available at https://academicintegrity.rutgers.edu/sites/default/files/pdfs/current.pdf. 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.

All work submitted should be your own, unless otherwise explicitly called for. In particular, Algenerated material is not allowed. Submissions from ai-generators like ChatGPT or Google Bard will be considered a violation of the above academic integrity policy. Since a core focus of this course is developing critical thinking skills and practicing the skill of writing a forest management plan and its associated prescriptions, it's important to practice these skills using your own work so that in the future you can be better equipped to evaluate generative Al output and use such tools more effectively.

DEI STATEMENT

I intend for students from all backgrounds, identities, and perspectives to feel respected, included and valued in this course and get the most out of it that they possibly can. I believe that diverse perspectives and experiences are a strength and resource, and it is my goal to foster a learning environment that reflects those values. I intend for the materials we encounter and activities we do to respect all aspects of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. I am always learning how to be a more effective teacher and I welcome and encourage your suggestions as we move through the semester. You can submit feedback to me directly inperson or via email, or anonymously via Canvas.

ADDITIONAL UNIVERSITY RESOURCES

Rutgers has numerous resources available to help you get the most out of your time here and provide support. A list of relevant resources is posted on Canvas. And if what you're looking for isn't on that list, please talk to me and I'll do my best to connect you the right support.