

Syllabus

Plant Conservation Science and Practice and the Conservation Garden Fall 2020

Meeting time: Tuesdays 5:15-7:15 pm. This is a 2-credit course. Some weeks we will meet for 1 hour in order to accumulate time for field trips to other Garden locations.

Meeting location: James & Delight Allen Education Center, North Carolina Botanical Garden, 100 Old Mason Farm Road, Chapel Hill, NC.

Instructor: Damon Waitt (dwaitt@unc.edu)

Office hours: by appointment 919-962-2184

Course goals: This class will be held at the North Carolina Botanical Garden and has two main goals: 1) to examine the state of plant conservation science and the changing role of botanical gardens in response to climate change, environmental sustainability, and threats to biodiversity and 2) to expose students to research and career opportunities in the world of plant conservation and public gardens.

Course topics: Topics will include seed and germplasm banks, reintroduction of species to the wild, using climate change forecasts to determine appropriate genetic material, assisted migration, invasive species, natural area restoration, conservation management, regional conservation planning, gardening to support pollinator populations and wildlife, the UNC Herbarium as a center of biodiversity research and information, educational programs, citizen science, gardening in the context of water use, fertilizers, pesticides, and other issues of sustainable environmental practices.

Class format: The class is for 2 credit hours. We will meet one day a week. Our usual format will include an introduction to each week's topic led by Garden staff and discussion of readings from the text and from the primary literature. Some class hours will be used for field trips to Mason Farm Biological Reserve, Coker Arboretum, Battle Park, the Carolina Campus Community Garden, the UNC Herbarium (Coker Hall), and other tracts and programs.

Text: *Blackmore, S., and S. Oldfield (editors). 2017. [Plant Conservation Science and Practice: The Role of Botanic Gardens](#). Cambridge University Press.*

Readings in the primary literature will be selected for many of the topics.

Diversity statement: I value the perspectives of individuals from all backgrounds reflecting the diversity of our students. I broadly define diversity to include race, gender identity, national origin, ethnicity, religion, social class, age, sexual orientation, political background, and physical and learning ability. I strive to make this classroom an inclusive space for all students. Please let me know if there is anything I can do to improve. I appreciate suggestions.

Community Standards in Our Course and Mask Use: This fall semester, while we are in the midst of a global pandemic, all enrolled students are required to wear a mask covering your mouth and nose at all times in our classroom. This requirement is to protect our educational community — your classmates and me — as we learn together. If you choose not to wear a mask, or wear it improperly, I will ask you to leave immediately, and I will submit a report to the [Office of Student Conduct](#). At that point you will be disenrolled from this course for the protection of our educational community. An exemption to the mask wearing community standard will not typically be considered to be a reasonable accommodation. Individuals with a disability or health condition that prevents them from safely wearing a facemask must seek alternative accommodations through the [Accessibility Resources and Service](#). For additional information, see [Carolina Together](#).

Honor code: All work done in this class must be carried out within the letter and spirit of the UNC Honor Code. You are expected to maintain the confidentiality of all exams by divulging no information about any exam to a student who has not yet taken that exam. No plagiarism allowed in any work related to this course. You are also responsible for consulting with your professors if you are unclear about the meaning of plagiarism or about whether any particular act on your part constitutes plagiarism. Please talk with the professor if you have any question about the Honor Code.

Class evaluation:

- 60% Participation in class discussions and activities
- 30% Assignments
- 10% Final exam (Saturday, November 21 at 7:00 p.m)

Schedule

WEEK	DATE	TIME	LOCATION	TOPIC	B&O CHAPTERS	ASSIGNMENT	NCBG STAFF
1	2020-08-11	5:15-7:15 PM	NCBG	Organizational meeting, overview of the class, grading and expectations, orientation	NA	Yes	Waitt
2	2020-08-18	5:15-7:15 PM	NCBG	A Conservation Garden	1	No	Waitt
3	2020-08-25	5:15-7:15 PM	NCBG	Understanding plant biodiversity, herbaria, databases, and publications	2	No	Weakley
4	2020-09-01	5:15-7:15 PM	NCBG	Threats to biodiversity; habitat loss, climate change, exploitation	3	No	Randall
5	2020-09-08	5:15-7:15 PM	NCBG	Threats to biodiversity; invasive species assessment, impacts and management; sentinel network	3	TBD	Stern
6	2020-09-15	5:15-7:15 PM	NCBG	<i>In situ</i> conservation; seed sources, reintroduction, assisted migration	4	Yes	Kunz
7	2020-09-22	5:15-7:15 PM	NCBG	<i>Ex situ</i> conservation; seed and germplasm banks, conservation genetics	5	No	Randall
8	2020-09-29	5:15-7:15 PM	MFBR	Natural area protection and restoration (Field Trip to MFBR)	6	TBD	Adams
9	2020-10-06	5:15-7:15 PM	NCBG	Regional conservation planning	NA	No	Tuttle/Randall

10	2020-10-13	5:15-7:15 PM	NCBG	Collections management; seed exchange, conservation through propagation	NA	Yes	Summer
11	2020-10-20	5:15-7:15 PM	NCBG	Environmental justice; food security, community gardens	7	No	Lorch
12	2020-10-27	5:15-7:15 PM	NCBG	Sustainable practices; the regenerative garden	NA	Yes	Starr
13	2020-11-03	5:15-7:15 PM	ZOOM/TOUR	Gardening with native plants	NA	No	Wait
14	2020-11-10	5:15-7:15 PM	NCBG	Public Education, Outreach and Engagement	8	TBD	Lelekacs
15	2020-11-17	5:15-7:15 PM	ZOOM	Careers in plant conservation and public gardens; Class summary	NA	No	All