



HORT 360: Landscapes of Sustainable Built Environments
Spring 2018
Tuesday/Thursday 3:55-5:10 PM
HFSB 101

Course Description and Prerequisites

Construction and maintenance considerations for landscapes in urban sustainable environments, specifically green roofs, bioretention cells, rain gardens, and living walls; how to maximize benefits of each system, current trends in regulatory and permitting processes of green infrastructure, and the development of industry-wide guidelines versus standards; HORT 201 or junior or senior classification required.

Learning Outcomes

Students will be able to:

1. Distinguish between green roof classifications, recognize current North American standards, and differentiate between a standard and a guideline.
2. Summarize the primary benefits of green roofs, describe green roof designs as they apply to those various benefits, and predict how changing the design of a green roof may affect those benefits.
3. Define the benefits of bioretention cells and rain gardens, and discuss design changes that maximize additional benefits.
4. Compare and contrast bioretention cells and rain gardens.
5. Discuss plant physiological adaptations for use in green roofs, bioretention, and living walls
6. Outline the installation process for built in place and modular green roof systems at the commercial scale, including comparing and contrasting various green roof establishment methods.
7. Describe in detail the installation process for rain gardens and bioretention cells.
8. Explain the various approaches to maintenance of sustainable built landscapes, and how those approaches will affect long-term plant palette and biodiversity.
9. Discuss the concepts of “performance”, “success”, and “failure” as related to landscapes of sustainable built environments.

Instructor Information

Name	Dr. Whitney Griffin
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Office hours	Tuesdays, Wednesdays, and Thursdays 2:00 PM – 3:00 PM or by appointment
Office location	HFSB 406

Textbooks

Recommended: *Living Roofs in Integrated Urban Systems*. 2015. Routledge. ISBN-13:978-0415535533

Recommended: *Green Roof Plants*, Edmund C. and Lucy Snodgrass. 2006. Timber Press. ISBN-13: 978-0-88192-787-0.

Course Schedule and Lecture Topics

Dates	Lecture Topic	Learning Outcome
January 16 and 18	Green roof classification, standards, and guidelines	1
January 23 and 25	Benefits of green roofs	2
Jan 30 and Feb 1	Green roof plants	5
February 6 and 8	Green roof installation methods	6
February 13 and 15	Green roof maintenance	8,9
Feb 27 and Mar 1	Bioretention and rain gardens: classification and design	3,4
March 6 and 8	Bioretention design considerations	3
March 20 and 22	Bioretention plants	5
March 27	Bioretention installation	3
April 3 and 5	Bioretention maintenance	8,9
April 10 and 12	Exterior living wall design	5
April 17 and 19	Interior living wall design	5
April 24 and 26	Living wall installation considerations	5
May 1	Maintenance of living walls	8, 9

Changes in Schedule

The instructor reserves the right to change the order and content of lectures as necessary. Exercises, assignments, and exam dates (excluding the final) may be changed by the instructor, but at least 5 days' notice will be given.

Grading Policies

This course will use a 10 point grading scale, as follows:

- A = 90-100%
- B = 80-89%
- C = 70-79%
- D = 60-69%
- F = 0-59%

Assessment	Date	Points
Exam 1	February 22	100
Exam 2	March 29	100
Exam 3	Monday May 7 @ 1:00 PM	100
Field Trip – Johnson Space Center green roof	TBD but likely a Friday all day	50
Case Study / Paper	Due Friday March 9 @ 10 PM	100
Weekly Online Quizzes (10)	Weekly, 20 points each	200
Class Participation	Daily	50
TOTAL		700

There will be no opportunities for “bonus points” or “extra credit”, except in cases where such opportunities may appear on a midterm or final exam. In these instances, all students are given equal opportunity for extra credit, if so desired. Please do not ask me if you can do an extra project, write a paper, or any other self-assigned activity to supplement your grade.

The case study / paper assignment will be turned in via Turnitin. Evidence of academic dishonesty or plagiarism per the Turnitin originality report will result in a reported violation to the Aggie Honor System Office and a grade of zero (0) on the assignment. Additional penalties may be enforced at the discretion of the AHSO.

Weekly quizzes must be completed through eCampus by 10:00 PM each Friday. You will have one (1) attempt at each quiz, and will be timed; however, there will be no time limit for completing the quiz. I highly recommend setting a weekly reminder alarm on your phone!

Attendance and Make-up Policies

Please do not miss class. **Late assignments will not be accepted.** Make-up assignments and exams will **only** be provided for official University excused absences; list of excused absences is available at <http://student-rules.tamu.edu/rule07>. Please notify me **in writing** within 48 hours of a university-excused absence to schedule the make-up work. Medical absences must be accompanied by a written excuse from a licensed medical professional.

Make-up exams will be different than the original exam but will cover the same material. The format of make-ups may or may not change from the originally assigned work. Students completing make-up assignments and exams will have the same amount of time to complete the make-up assignment as their peers had for the original work. Participation points will not be docked if absences are for a university-excused reason.

Students missing class for any non-approved reason are responsible for obtaining assignments and exercises from classmates. Students missing class for a non-approved reason will not be awarded any participation points for that day, and the due date for assignments will not change.

Feedback

I am open and receptive to student feedback, positive or negative. Without informative feedback, I cannot improve the course or better hone my skills as a teacher. Please feel free to see me for verbal feedback, slide a note under my office door, mail me an anonymous letter, or email me. Skywriting is also welcome but could prove economically prohibitive.

Academic Integrity

Students are expected to attend all classes and field trips, complete all assignments independently and on time, and be active participants in class. Violations will be handled in accordance with the Texas A&M University Regulations governing academic integrity, which are outlined the Aggie Honor System web page (<http://aggiehonor.tamu.edu>) Please refer to the TAMU website on plagiarism and scholastic dishonesty for resources and a detailed explanation of what constitutes plagiarism.

"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Cell Phone Policy

The nature of this course is such that student engagement and participation is paramount to success. Cell phones will be an unnecessary distraction and should be set to do not disturb settings; i.e., no ring and no vibrations. If a cell phone rings during class you have a choice: allow me to answer the call, or lose the week's participation points instead. If you need to make a call during class, please excuse yourself quietly and return as quickly as possible. The sole exception to this policy will be during labs or class meetings classified as "field trips", in which taking photos will be encouraged.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit <http://disability.tamu.edu>.