

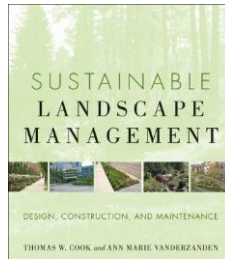
# HORT 3080 CT<sup>2</sup> Sustainable Landscape Garden Design, Installation, & Maintenance [2018]

**Instructor:** Dr. Ellen Vincent,  
**Class:** P&A Room E-147 T, TH 9:30-10:45 AM  
**Office:** 173 P&A Building  
864.656.1342 office  
Office hours: Monday and Wednesday 8:00-10:00 am or by appointment  
Email: ellenav@clemson.edu

Photo by Craig Mehaffey



**Integrity Statement:** As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a 'high seminary of learning.' Fundamental to this vision is a mutual commitment to truthfulness, honor and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.



<https://archive.inside.iastate.edu/2011/1215/celt.php>  
[https://www.amazon.com/gp/product/0470480939/ref=db\\_s\\_a\\_def\\_rwt\\_bibl\\_vpji\\_i0](https://www.amazon.com/gp/product/0470480939/ref=db_s_a_def_rwt_bibl_vpji_i0)  
<https://www.amazon.com/Thomas-W.-Cook/e/B00420E4FG>

## Required Texts

**(1) *Sustainable Landscape Management: Design, Construction, and Maintenance***

Thomas W. Cook and Ann Marie VanDerZanden (2011)  
College Bookstore Hendrix Center

**(2) *The Sustainable Sites Initiative: Guidelines and Benchmarks 2009*** (PDF download)

American Society of Landscape Architects, Lady Bird Johnson Wildflower Center at the University of Texas at Austin, and United States Botanical Garden  
[http://old.sustainable-sites.org/report/Guidelines%20and%20Performance%20Benchmarks\\_2009.pdf](http://old.sustainable-sites.org/report/Guidelines%20and%20Performance%20Benchmarks_2009.pdf)

## Recommended Texts (optional)

- (1) *Manual of Woody Landscape Plants* by Michael Dirr (sixth edition, 2009), (required for HORT 303 Landscape Plants class)
- (2) *Herbaceous Perennial Plants: A Treatise on Their Identification, Culture, and Garden Attributes* by Allan Armitage (second edition, 2008)



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## Sustainable Sites:

Holly Owings, MLA



<http://earthdesignsc.com/about/staff/>

Watt Center Green Roof



Lee Hall Green Roof



Photos by Ellen Vincent

## Critical Thinking:

Judge Ricardo Urbina Dr. Frank Fear



David Brooks



Author Chamamanda. N. Adichi



[https://library.columbia.edu/locations/ccoh/digital/rule\\_of\\_law/urbina.html](https://library.columbia.edu/locations/ccoh/digital/rule_of_law/urbina.html)

<https://www.lansingstatejournal.com/story/opinion/contributors/viewpoints/2018/02/04/fear-msu-needs-culture-change-and-end-elitism/300441002/>

<https://twitter.com/nytdavidbrooks>

<https://connectnigeria.com/articles/2015/11/baileys-prize-crowns-chimamanda-ngozi-adichie-as-its-best-of-the-best/>

### Critical Thinking Student Learning Outcomes

- (1) Explore complex challenges associated with sustainable landscape design, installation and maintenance.
- (2) Analyze sustainable design problems using multiple lenses and perspectives.
- (3) Extrapolate from one conceptual context to others in the sustainable landscape.
- (4) Develop creative solutions to complex challenges.
- (5) Communicate complex ideas effectively.

**This class is a Clemson Thinks2 (CT2) seminar –developed to increase and enhance your critical thinking skills**

### Goals of the CT2 Seminar

1. Students will develop university-level competence at the activities that characterize critical thinking.
2. Students will describe the specific activities that characterize critical thinking and will reflectively report on their own use of these tools.
3. Students will apply critical thinking skills to solve problems that occur outside the academic classroom.

**What are critical thinking skills?**

1. Determine the relevance of information for evaluating an argument or conclusion.
2. Recognize flaws and inconsistencies in an argument.
3. Evaluate competing causal explanations.
4. Evaluate hypotheses for consistency with established facts.
5. Determine whether an artistic interpretation is supported by evidence contained in the work.
6. Recognize the salient features or themes in a work of art (landscape design).
7. Evaluate the appropriateness of procedures for investigating a question of causation.
8. Evaluate data for consistency with established facts, hypotheses, or methods.

**Seminar Design**

- 3 credit hours
- Required class for horticulture majors, other majors with a strong interest are welcome
- Common student learning outcomes for critical thinking and sustainable landscape design
- Pre and post critical thinking testing built into the course; subject content exams

**Teaching/Learning Strategies**

Critical thinking skills will be promoted through modeling (classroom experience), personal experience/reflection (essays), discourse (group exercises in class), and vocabulary (tests).

**Critical Thinking Artifacts**

- CT essays and surveys will be representative examples of students' critical thinking skills.
- Collective responses to selected CT questions from in-class exams will be submitted as artifacts.
- Pre and post scores on CT tests will be available as artifacts.

**Assessment**

**Writing:** Critical thinking visual essays and plant profile sheets will be due. See rubrics.

**Participation:** Active engagement in group discussions, group exercises, and class activities.

**Exams:** 2 CT tests (on-line pre-test and in class post test); 3 in-class exams and one cumulative final exam.

The instructor *may* offer an option that allows the average of the in-class exams to be substituted for the final exam.

**Grading:**

Item	Qty	Points	Percentage
Essays/critical thinking	2	100 points each	15%
Plant Profile sheets	2	100 points each	15%
Participation/engagement	Every session	100 points	15%
Exams on-line CT	2	100 points each	15%
Exams in-class	4	100 points each	40%

Attendance is mandatory

Extra credit opportunities may be announced during the semester

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**Attendance Policy:** Attendance is required at every class unless classes have been officially canceled by the University. **If you miss a class you are responsible for the material covered during that class. Excused absences include official hospital or Redfern documentation and official field trip documentation from other classes prior to the absence.** Four unexcused absences results in a loss of 5 points from your final grade. Five unexcused absences result in a loss of 10 points from your final grade. Six or more unexcused absences results in 20 points from your final grade.

**All special circumstances** (critical communications during class, arriving late to class, leaving early from class, etc) **should be negotiated with the instructor prior to the class.** Late arrivals and leaving early will be treated as absences unless previously negotiated with instructor.

**Positive engagement** is strongly encouraged in class. Please treat other people's views with respect and courtesy and allow your inquisitive mind to take precedent over your judgmental mind. Also, refrain from texting, emailing, or using your computer for unrelated work while in class. All legitimate conflicts requiring connectivity should be negotiated with the instructor prior to class to avoid confusion.

**Email professionalism:** Please be sure to include an accurate and current subject line in each email. Every email (especially with attachments) should contain a greeting, a sentence or two explaining the attachments, and a closure. A professional signature should be used that includes your name, major, minor (if you have one), and class year.

**Assignment Citation Policy:** All work submitted for a grade must be your own, unless group work is assigned. All text included in assignments that was written by someone other than you must be correctly quoted and cited. All images included in assignments must be identified to Web page/author/artist. If you are the creator of the image, please cite your name.

**Clemson email address** should be checked at least once a day for potential messages dealing with this course. Do not forward your Clemson mail to another account (Yahoo, AOL, etc.) as those accounts tend to have issues like full in-boxes and limitations on attachments.

**Clemson University Title IX (Sexual Harassment):** Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This policy is located at <http://www.clemson.edu/campus-life/campus-services/access/title-ix/>. Ms. Alesia Smith is the Clemson University Title IX Coordinator, and the Executive Director of Equity Compliance. Her office is located at 110 Holtzendorff Hall, 864.656.3181 (voice) or 864.656.0899 (TDD).

**Accessibility Statement:** Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing [studentaccess@lists.clemson.edu](mailto:studentaccess@lists.clemson.edu), or by visiting Suite 239 in the

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Academic Success Center building. Appointments are strongly encouraged – drop-ins will be seen if possible, but there could be a significant wait due to scheduled appointments. Students who receive Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student’s responsibility to follow this process each semester. You can access further information here: <http://www.clemson.edu/campus-life/campus-services/sds/>.

**Instructor absence:** If I have not arrived for class within the first fifteen minutes please feel free to lead a discussion of the previous class material or dismiss class, at your option. I will be in contact with the class via email as soon as possible. **Inclement weather:** When county government offices are closed, local Clemson University campuses also are closed.

Please see me privately if you have special needs in this course.

## Sustainable Design, Installation, and Maintenance:

Joan Nassauer, MLA



Randy Hester, MLA



The High line, NYC



[http://seas.umich.edu/research/faculty/joan\\_nassauer](http://seas.umich.edu/research/faculty/joan_nassauer)

<https://www.pps.org/article/rhester>

[https://en.wikipedia.org/wiki/High\\_Line#/media/File:High\\_Line\\_20th\\_Street\\_looking\\_downtown.jpg](https://en.wikipedia.org/wiki/High_Line#/media/File:High_Line_20th_Street_looking_downtown.jpg)

## Lady Bird Johnson Wildflower Center, Austin TX



Photos by Ellen Vincent

*Dr. Vincent\_Horticulture\_ellenav@clemson.edu*

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Date	Class Item	Assignment
Aug 23 TH	Class overview: into questionnaire, syllabus, intro to sustainability	Read <i>Sustainable Landscape Management</i> chapters 1&2 (pp.1-38)  View Webpage "Sustainable Sites Initiative" and lightly review "Certification" and "Directory/Projects" at <a href="http://www.sustainablesites.org/">http://www.sustainablesites.org/</a>
Aug 28 T	Critical Thinking pre-test (David Knox, Founding Director CT) <b>Bring fully charged laptops to class</b>  Critical thinking introduction	Read Brookfield <i>Teaching for Critical Thinking</i> chapter 1 (pp. 1-25)  Read Facione <i>Critical Thinking: What It Is and Why It Counts</i> (pp. 1-28)
Aug 30TH	Principles of design	-Read <i>The Case for Sustainable Sites</i> (2009) -View Webpage "Sustainable Sites Initiative" and read two articles posted at the bottom of the page or via the link at <a href="http://www.sustainablesites.org/">http://www.sustainablesites.org/</a> -Read Ingels "Principles of design" chapter 8 (pp. 139-159) in <i>Landscaping Principles and Practices</i> CT2 essay1 assigned
Sept 4 T	Sustainable landscape design	<b>Critical thinking essay1 and image due by 9:30 a.m.</b> View Debate: Will Alsop and Martha Schwartz <a href="https://vimeo.com/2552999">https://vimeo.com/2552999</a> <b>(8:01)</b>
Sept 6TH	Sustainable teams	Read Chapter 3 "Sustainable landscape construction" (pp. 39-60) in <i>Sustainable Landscape Management</i>  Read Chapter 4 "Retrofitting existing landscapes for sustainability" (pp. 61-79) in <i>Sustainable Landscape Mgt</i>
Sept 11 T	Sustainable landscape construction	View SITES v2 Web page "Certified Sites" <a href="http://www.sustainablesites.org/projects?q=projects">http://www.sustainablesites.org/projects?q=projects</a>
Sept 13TH	Ecosystems and the landscape	Read Chapter 5 "Ecosystem development and management" (pp. 81-99) in <i>Sustainable Landscape Management</i>  Read Chapter 6 "Environmental issues" (pp. 101-116) in <i>Sustainable Landscape Management</i>
Sept 18T	Landscape perception/client interview/user's needs	Read "Rare and commonplace beauty" by R. Hester (pp. 107-109) on Blackboard  Read "The shared landscape: What does aesthetics have to do with ecology?" by Gobster, Nassauer, Daniel, and Fry on Blackboard Plant profile sheet 1 assigned

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Date	Class Item	Assignment
Sept 20TH	CT <sup>2</sup> : Danger of a Single Story  Directed review for Exam 1	“Danger of a single story” by David Brooks, NY Times TED Talk Video “Danger of a single story” by Chimamanda Ngozi Adichie (18:43) <a href="https://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story">https://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story</a>
Sept 25 T	<b>EXAM 1</b>	
Sep 27 TH	Internship presentations	
Oct 2 T	Holley Owings, EarthDesigns, MLA, ASLA	<b>Plant profile sheet1 due by 9:30 a.m.</b>
Oct 4 TH	Socratic questioning Ricardo Urbina (retired federal court judge) attending	Read “What will the neighbors think? Cultural norms and ecological design” by Nassauer, Wang, and Dayrell on Blackboard
Oct 9 T	Lee Hall green roof tour, Jeff Baker, Superintendent Central Campus Grounds	
Oct 11TH	Watt Center green roof tour Tim Howard, Project Manager Watt Center Tim Howard <timh@clermson.edu>	
Oct 16 T	<i>Social Life of Small Urban Spaces: A Film</i> by William H. Whyte	
Oct 18 TH	Sustainable management: Measuring environmental impacts	Read Chapter 8 (pp. 193-214) “Managing trees, shrubs, and beds sustainably” in <i>Sustainable Landscape Management</i>  Read chapter 9 (pp. 161-190) “Lawns in sustainable landscapes” in <i>Sustainable Landscape Management</i>  Read <i>The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009</i> Prerequisite 1.1 (pp. 15-18) CT2 essay2 assigned
Oct 23 T	Environmental issues	<b>Critical thinking essay2 and image due by 9:30 am.</b> Read Chapter 6 “Environmental issues” in <i>Sustainable Landscape Management</i> (pp. 101-116)  Read Chapter 7 “Sustainable soils in landscapes” (pp. 119-130) in <i>Sustainable Landscape Management</i>  Read <i>The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009</i> “Introduction; How to use the guidelines and performance benchmarks; and Index of prerequisites and credits” (pp. 1-14)

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Date	Class Item	Assignment
Oct 25 TH	Sustainable landscape soils Directed review for Exam 2	
Oct 30 T	<b>EXAM 2</b>	
Nov 1 TH	Landscape maintenance	Read “What will the neighbors think? Cultural norms and ecological design” by Nassauer, Wang, and Dayrell on Blackboard  View video: The High Line (6:22) at <a href="http://www.youtube.com/watch?v=uRp8z4rLj-Q">http://www.youtube.com/watch?v=uRp8z4rLj-Q</a>
Nov 6 T	FALL BREAK	
Nov 8 TH	Sustainable lawns	Read Chapter 9 (pp. 161-190) Lawns in Sustainable Landscapes in <i>Sustainable Landscape Management</i> Plant profile sheet2 assigned
Nov 13 T	Sustainable pest management	<b>Plant profile sheet2 due by 9:30 a.m.</b>  Read Chapter 10 (pp. 193-214) Sustainable Pest Management in <i>Sustainable Landscape Management</i>
Nov 15 TH	Critical Thinking post test (David Knox, Founding Director CT) <b>Bring fully charged laptops to class</b>	
	Review & group exercises	
Nov 22 TH	Holiday	
Nov 27 T	Sustainable Sites program	
Nov 29 TH	Directed review for Exam 3	
Dec 4 T	<b>EXAM 3</b>	
Dec 6 TH	Critical review in class/survey	
Dec 12 W	Final exam 8:00 am -10:30 am	