Prerequisite: LAND 2210
Course: 3 Hours; one lecture + two 2-hour labs per week
Lecture: Wednesday, 12:20-1:10 PM, Room B2 Main Library Auditorium
Labs: Morning Sections 8:30-10:30AM, Afternoon Sections 2:00-4:00PM, 4th Floor Studio, Caldwell

Course Description
Introduction to the range of materials used in the built environment by landscape architects: metals, concrete, masonry, glass, plastics and wood. The emphasis is on understanding the properties of these materials and implications for design. Implications include reliability, durability, flexibility, environmental costs, and economic costs. Specific structures to be designed and detailed include pavements, steps, walls, decks, railings and irrigation systems. The course will consist of lectures, outdoor walks to observe installations, construction observations/videos and studio projects.

Objectives
Students satisfactorily completing this course will be able to demonstrate through testing and through the production of model, graphic and written materials the following:

Knowledge
- Demonstrate an understanding of common landscape construction materials and their applications in landscape structures.
- Demonstrate an understanding of construction material life-cycling and the relationship between economic and environmental material choices.
- Develop an understanding of construction material impacts on natural systems.
- Develop an understanding of the structural qualities and limitations of construction materials.
- Develop an understanding of irrigation systems and their place in sustainable developments.
- Develop a basic understanding of construction document preparation.

Skills:
- Demonstrate the ability to prepare hand-drawn construction drawings (plans, sections, elevations, and various details) in conformance with standard industry conventions.
- Demonstrate the ability to design in model and graphic detail a pavement area using monolithic paving materials, modular paving materials, and granular paving materials.
- Demonstrate the ability to design in model and graphic detail a retaining wall and a stairway using monolithic materials, modular materials and wood/wood-like materials.
- Demonstrate the ability to design in model and graphic detail a wood platform structure (deck) using wood and/or wood-like materials.
- Demonstrate the ability to design in graphic detail an irrigation system that meets typical industry standards for functional capability.
- Demonstrate the ability to prepare a cost analysis for each of the structures noted above.
- Demonstrate the ability to prepare a life-cycle analysis for each of the structures above.
- Demonstrate the ability to apply principles of sustainability and to satisfy economic limitations within the context of a construction design project.

Values:
- Promote “environmentally positive, financially sound, and sustainable solutions” in landscape construction.
Studio (Lab) Projects
The studio projects are organized around a real site. By the end of the semester you will have produced a series of construction drawings documenting a constructed outdoor environment.

Irrigation Workshop
The irrigation segment of the class will be performed in the context of a weekend workshop on Saturday, March 21 and Sunday, March 22. The workshop is not optional, attendance is required; the entire irrigation project will be completed in the workshop.

Exams
This course will include a midterm and final exam. Exams may require the use of a calculator. Computers, cell phones and other electronic devices that can be used for communication are not permitted. The midterm exam will cover all subjects presented prior to the midterm exam date. The final exam is cumulative. References for the exams include all class lectures, demonstrations, class handouts, desk critiques, red-lined drawings, reference texts on reserve in Owens Resource Library, and any other materials in the class folder.

Course Grading

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<tr>
<th>Project</th>
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<tbody>
<tr>
<td>Site measurement drawing</td>
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<tr>
<td>Pavement project</td>
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<tr>
<td>Wall and steps project</td>
<td>15%</td>
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<tr>
<td>Deck, wall &amp; steps project</td>
<td>15%</td>
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<tr>
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<td>Value construction project</td>
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<td>Lab Attendance</td>
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<td>Final Exam</td>
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<td><strong>Total</strong></td>
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*The professor reserves the right to adjust grade percentages as necessary based on actual course time devoted to the projects.

Policies
Drafting: All drafting will be done by hand. CAD drafting and lettering will not be accepted. Students should bring to each studio class their current drawings and any drafting equipment necessary to continue work in class. Specific equipment required: 8’ to 12’ measuring tape, architectural scale, engineering scale, and a pad of grid paper. A camera or camera-phone is recommended for documentation during site visits, demonstrations and walks.

Code of Ethics: Professional ethics and conduct are essential parts of landscape architecture practice. Work habits, presentation qualities, team conduct, class participation, and fulfillment of class obligations are measures of professionalism. Because our profession is licensed to protect public health, safety and welfare, a code of professional ethics is extremely important. View the ASLA Code of Professional Ethics at http://www.asla.org/about/codepro.htm. While in school, students are required to fully comply with UGA ethics code for academic honesty. You can view the UGA code at http://www.uga.edu/honesty/. All portions of work submitted for class projects must be the personal creative work of each individual student. The copying of drawings from any source, without proper citation, is plagiarism.
Attendance: Students are expected to attend and participate in all class meetings. A student with excessive unexcused absences may be administratively withdrawn from the course. Absences may be excused for family emergencies and for illness with a valid health service note. All class meetings will begin promptly at the scheduled times. Attendance will also be scored in the following manner:

- Lecture Attendance: 13 Wednesday lectures, 7.69 pts. per day = 100 pts.
- Lab Attendance: 25 Tues/Thurs labs, 4.00 pts. per day = 100 pts.

Project Deadlines: Projects are due at the assigned date and time. Any project turned in within 24 hours after the assigned date and time is automatically marked down a full letter grade. After 24 hours beyond the original due date and time, a project will not be accepted; the grade for the project is zero. Exceptions may be arranged with faculty before a project is due; after the assigned time, exceptions may be granted only with medical excuse. Incomplete grades will not be issued. Only in circumstances of personal illness or special emergency, will this policy be altered. It is the student's responsibility to bring any such emergency to the instructor's attention. The School reserves the right to select and retain possession of all written and graphic student work completed for academic credit. Access to archived works will be granted to students for reproduction or short-term display.

Grading Standards

A= Distinguished Work: Work reflecting superior design and graphic execution, with great attention to detail and may exceed project requirements; changes/revisions are unnecessary or minor.

B= Very Good Work: Work which demonstrates a solid understanding of the concepts, structures and materials in the project but requires some changes or revisions to clearly and completely communicate at a detailed level.

C= Satisfactory Work: Work which indicates a satisfactory understanding and execution of the project, but which needs moderate revisions to fully communicate and thoroughly demonstrate implementation of concepts.

D= Unsatisfactory Work: Work which is partially incomplete and/or in which the process and/or project solution is poor or inconsistent. The work would require extensive revisions.

F= Failure: Work which is substantially incomplete and/or demonstrates a failure to either comprehend or implement the subject matter.

Plus/Minus scores shall be awarded as follows:

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Texts & References

Required Text:


Recommended references for your personal library:


1 American Society of Landscape Architects Code of Environmental Ethics. Preamble. [http://www.asla.org/about/codeenv.htm](http://www.asla.org/about/codeenv.htm)