

Introduction to Site Design (11:550:221)

Landscape Industry

Fall 2014

3 Credits

Room: Blake Hall 2nd Floor Rear Studio

Instructors: Jeremiah D. Bergstrom

Lecture/Studio: Monday & Thursday 10:55 – 1:55

Contact Information

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ENR Office 226 or Room 105

(Environmental and Natural Resources Building)

Office hours: by appointment

Learning Objectives

Studio and lecture activities have been developed to accommodate the following learning objectives:

- Students will explore the steps of the site design process within the context of sustainability to develop an understanding of the relationships between nature and the built environment.
- Students will learn to expose the patterns and processes of the natural world to create programs that minimize impacts to natural systems.
- Students will explore opportunities for designing and constructing landscapes that are “sustainable” and can be effectively maintained over time.
- Students will work to refine analysis and graphic skills through sketching and projects of increasing complexity and magnitude.
- Student will address problem-solving, program development, inventory and assessment, and conceptual design in site planning projects .
- Student will learn to explore basic landform manipulation and the integration of circulation, structures, and utilities in site planning projects.

Course Description

For those looking to a career in the Landscape Industry field or as Environmental Designers, understanding the fundamentals of the design process and having the ability to quickly and effectively assess a project site can be critical to long-term success. Intervening in the landscape to create new spaces, install new structures and create places for people is a complex challenge. Designing a site to accomplish these goals while protecting natural resources and respecting the cultural heritage of a place adds an even greater challenge. In our current and future work in the Landscape Industry, professionals are being asked to minimize the impact our work has on the environment and to create places that can cost-effectively be maintained. Understanding and integrating the principles of sustainability can bring new perspectives to problem-solving when faced with a challenging site design project.

Expectations of Student Participation

Students are expected to participate fully in the studio by being prepared for each class and open to the ideas and challenges that unfold. You should read the syllabus carefully and be aware of required readings, upcoming lectures, and due dates.

Readings: You are expected to read selected materials prior to class. Required readings will be posted.

Lectures: The studio lectures are both project-specific and topic-based to equip you with general knowledge needed in the field. You are expected to take notes and keep them in your studio binder and to explore topics independently.

Writings: Weekly writing topics will be posted. You are expected to complete the writings and keep a record of all work in your studio binder.

Graphics/Sketching: Weekly exercises will be posted. You are expected to complete the exercises, independently develop additional skills and keep all work in your studio binder.

Studio: Much of your learning will occur through your active engagement in studio – both during the actual class and while working at your studio desk during non-class time. The distinction between studio as a class and studio as a space and community is quickly blurred as you get focused on projects and rely on your peers for perspective and support. In the studio course itself, you are expected to engage in all activities, including site visits and analysis, design exercises, individual desk crits, group pin-ups, and project reviews. Project development will occur over a series of weeks but continued development of the design is expected on a daily basis. For the studio to be an engaged learning experience, you are expected not only to present thoughts/processes in your own design, but also contribute to the learning of your peers through conversations and critiques during and outside of studio time. You should plan a minimum of 8 hours per week outside of class to read, develop designs, prepare for desk crits, and finalize presentations.

Project Reviews: Project reviews are opportunities to present your work, respond to questions, consider other interpretations, and gather feedback. Attendance is MANDATORY at all reviews for the entire semester.

Studio Binder: All work is to be recorded and kept in a studio binder that will be evaluated by the instructor. This “journal” will be used to document your work, development, participation, and efforts related to this studio course. Design development should be recorded, as should site observation and documentation notes, writings, graphic exercises and sketches. This will provide a record of your skill development and design process for the studio effort. The binder should be a running compilation of notes, thoughts, writings, and sketches. This collection and record of your work will be used to look back on your efforts in order to understand how you have progressed.

Contact: It is important that all students are given the same updates and information. Most of this will occur during class lectures, but the instructor will also rely on email to the students. You are expected to check your email regularly.

Grading / Evaluation

Your grade will be based on your attention to the project goals, the development of your design ideas over the course of the project, the quality of your writing and site observations, growth and development of graphic representation skills, and the quality of your final representation. **Steady and continued progress in presentation quality will be rewarded, as will risk-taking and creativity.**

The final grade will be based on the following percentages:

Project 1 (including writings, graphics/sketching)	10 %	Wk 1-2
Project 2 (including writings, graphics/sketching)	10 %	Wk 3-5
Project 3 (including writings, graphics/sketching)	20 %	Wk 6-10
Final Project (including writings, graphics/sketching)	30 %	Wk 11-16
Studio Binder (graded 3 times over the semester)	30 %	Entire Semester

The following scale applies:

A	> 90%	Outstanding
B	> 80%	Very Good
C	> 70%	Acceptable
D	> 60%	Unacceptable
F	≤ 60%	Failure

Project Evaluation: For each project you will receive two sub-grades:

- Design development (how well did you initiate and develop your design ideas over the duration of the assignment to meet the stated project goals and provide a unique creative expression)
- Presentation of final design (quality of your final deliverables and comprehensive result conveying process and intended design result)

Studio Binder:

This binder will be used to record your work over the course of the semester. It should include a mixture of assigned work and self-directed/independent work and studies. It should contain approximately equal amount of text, diagrams, and drawings. Accompany drawings with explanatory notes as necessary. This will be graded 3 times during the semester. It is a necessary tool for the instructor who will be evaluating your organizational skills as well as your skill development and thorough understanding and comprehension of design ideas.

Departmental Grading Guidelines

While the assignment of grades is ultimately the purview of the instructor, the department uses the following guideline for understanding appropriate grading in its courses:

A – Outstanding – This not only means fulfilling the requirements, but impressing and going beyond the initial expectations of the project. The student has demonstrated a superior grasp of the subject matter coupled with a high degree of creative or logical expression, and strong ability to present these ideas in an organized and analytical manner.

B – Very Good – The student has demonstrated a solid grasp of the material with an ability to organize and examine the material in an organized, critical, and constructive manner. The projects and in-class performance reveal a solid understanding of the issues and related theories or literature.

C – Acceptable – The student has shown a moderate ability to grasp concepts and theories for the class, producing work that, while basically adequate, is not in any way exceptional. This performance in class display a basic familiarity with the relevant literature and techniques.

D – Unacceptable – The work demonstrates a minimal understanding of the fundamental nature of the material or the assignment with a performance that does not adequately examine the course material critically or constructively. Students cannot graduate from the Landscape Architecture program with 2 D's in required 550 classes.

F – Failure – The student has demonstrated a lack of understanding or familiarity with course concepts and materials. Their performance has been inadequate. Failure is often the result of limited effort and poor attendance which may indicate that the student is not in the proper field of study.

Ownership of Student Work

It is the intent of this course to return as much work as possible to each student; however, it is also the case that examples of work must be kept by the Department for its professional accreditation and for purposes of exhibition. Should the Department retain your drawings, you will be given the opportunity to obtain a print, scan, or photographic record of your work. Department files are OFF LIMITS to students.

Use of Facilities and Equipment

Studio cannot be taught without reliable facilities. We expect you to use the facilities and equipment (projection equipment, department cameras, drafting equipment) responsibly with particular regard to the clearly established rules about their use as specified in the student handbook:

http://landarch.rutgers.edu/current_students/student%20handbook/StudentHandbook_web_SectI.pdf

These rules cover access to studio, vandalism, table assignments, personalization of work space, smoking and drinking, use of the lockers, access to the reference collection, and basic rules governing the use of the computer lab. Failure to observe rules may result in loss of access.

http://landarch.rutgers.edu/current_students/student%20handbook/StudentHandbook_web_SectII.pdf

Attendance

The Department of Landscape Architecture requires attendance in all of its classes. The individual student's development is largely dependent upon two aspects of education. First is the exposure to and assimilation of a body of information that relates to the field. Second is the application of this knowledge through studio projects and problem-solving skills developed through critiques, reviews, and interactions during each project.

The Rutgers Landscape Architecture and Landscape Industry curriculum is designed to develop both areas. Attendance and participation in all lectures and studios are essential if the student is to achieve his/her maximum potential. More than three unexcused absences in a term will result in a full step

reduction in your semester grade (i.e. A to B). Each additional absence will result in another step reduction.

A minimum level of participation is defined as being in attendance for the entire duration of a class session. It is the student's responsibility to be in attendance for the entire class session. Late arrivals greater than ten minutes will be marked as absent. It is the student's responsibility to catch up on material for missed classes.

Attendance and participation in critiques and reviews is mandatory for the entire term. Students on academic probation have NO ALLOWABLE UNEXCUSED ABSENCES.

Creation of a Studio Community: Notes on Studio Space and the Use of Shared Facilities

The design studio environment should reinforce and deepen the design theories and methods taught by the instructors. The class is comprised of students with varied skill sets. It is expected that students will work together in the studio on homework assignments, and that students will learn, as well, from one another. In addition to attending two studio classes per week and common lecture, students are encouraged to work together in the studio outside class times on their assignments and drawing projects. It is assumed that all students will respect one another, each other's work, and the studio space held in common by all.

An ethic of stewardship should be extended to the studio environment as well as to the outdoor environment. One of the most important ways of ensuring a culture of civility is to maintain a clean workspace, keeping desks and floors clean and property undamaged. Because we share the building with entomology, there are ongoing living experiments that must be respected: **all spraying must take place outdoors**. For purposes of safety, the use of power tools is prohibited in the building. The drafting tables are covered with a vinyl board covers (the trademark name is Borco) that provide a smooth drawing surface. **Anyone who damages a surface—by cutting into it, marking it with ink, ruining the surface with adhesive glue, etc.—will be held responsible for the replacement cost of \$150.**

Studio desk locations will be assigned by the instructors.

TENTATIVE SCHEDULE

	Lecture	Studio	Lecture	Studio
Week 1 <u>Readings:</u> The Case for Sustainable Landscapes			<u>Sept. 4</u> <i>Introduction to Site Design</i> Writing Assignment	<u>Sept. 4</u> Studio introduction Graphics/Sketching Exercise Project 1: Collage
Week 2 <u>Readings:</u> GPSD Ch. 1-4	<u>Sept. 8</u> <i>What are Sustainable Landscapes?</i> Writing Assignment	<u>Sept. 8</u> Graphics/Sketching Exercise Project 1: Collage	<u>Sept. 11</u> <i>Human Habitat & Principles of Sustainability</i>	<u>Sept. 11</u> Intro to Landscape Graphics Collage Development
Week 3 <u>Readings:</u> Land. Arch. Ch. 1-2	<u>Sept. 15</u> <i>Climate and the Landscape</i> Writing Assignment	<u>Sept. 15</u> PROJECT DUE 11:00 AM Presentation/Review Project 1: Collage Graphics/Sketching Exercise	<u>Sept. 18</u> <i>Land & Natural Systems</i> Writing Assignment	<u>Sept. 18</u> Graphics/Sketching Exercises Freehand lettering Freehand drawing Concept plan drawings Project 2: Mobile
Week 4 <u>Readings:</u> Land. Arch Ch. 3-4 LA Graphics Ch. 1-4	<u>Sept. 22</u> <i>Water in the Landscape</i>	<u>Sept. 22</u> Graphics/Sketching Exercises Concept plan drawings Project 2: Mobile	<u>Sept. 25</u> <i>Vegetation & Plant Communities</i> Writing Assignment	<u>Sept. 25</u> Graphics/Sketching Exercises Section-Elevation Project 2: Mobile
Week 5 <u>Readings:</u> Land. Arch Ch. 5, 6, 7 LA Graphics Ch. 6	<u>Sept. 29</u> <i>Landscape Character & Topography</i>	<u>Sept. 29</u> Graphics/Sketching Exercises Section-Elevation Project 2: Mobile	<u>Oct. 2</u>	<u>Oct. 2</u> PROJECT DUE 11:00 AM Presentation/Review Project 2: Mobile

	Lecture	Studio	Lecture	Studio
Week 6	<u>Oct. 6</u> <u>NO CLASS</u>	<u>Oct. 6</u>	<u>Oct. 9</u>	<u>Oct. 9</u> STUDIO BINDER REVIEW w/ INSTRUCTOR
Week 7 <u>Readings:</u> Land. Arch Ch. 8 LA Graphics Ch. 5 GPSD Ch. 5	<u>Oct. 13</u> <i>Site Planning & Design</i> Writing Assignment	<u>Oct. 13</u> Graphics/Sketching Exercises Presentation Plans Project 3: Site Inventory & Analysis	<u>Oct. 16</u> <i>Site Planning & Design</i>	<u>Oct. 16</u> Graphics/Sketching Exercises Presentation Plans Project 3: Site Inventory & Analysis
Week 8 <u>Readings:</u> Land. Arch Ch. 9 GPSD Ch. 6-7	<u>Oct. 20</u> <i>Site Development</i> Writing Assignment	<u>Oct. 20</u> Graphics/Sketching Exercises Graphic Symbols – stone, paving, wood, structures Project 3: Sections & Elevations	<u>Oct. 23</u> <i>Stormwater Management</i>	<u>Oct. 23</u> Graphics/Sketching Exercises Graphic Symbols – stone, paving, wood, structures Project 3: Sections & Elevations/Conceptual Design
Week 9 <u>Readings:</u> Land. Arch Ch. 10	<u>Oct. 27</u> <i>Landscape Planting</i> Writing Assignment	<u>Oct. 27</u> Graphics/Sketching Exercises Graphic Symbols – plant materials Project 3: Design Development	<u>Oct. 30</u> <i>Designing with Native Plants</i>	<u>Oct. 30</u> Graphics/Sketching Exercises Graphic Symbols – plant materials Project 3: Final Design

	Lecture	Studio	Lecture	Studio
Week 10 <u>Readings:</u> Land. Arch Ch. 11	<u>Nov. 3</u> <i>Sustainable Construction Practices</i> Writing Assignment	<u>Nov. 3</u> PROJECT DUE 11:00 AM Presentation/Review Project 3:	<u>Nov. 6</u> <i>Graphics in Design</i>	<u>Nov. 6</u> STUDIO BINDER REVIEW w/ INSTRUCTOR
Week 11 <u>Readings:</u> Land. Arch Ch. 12 & 13	<u>Nov. 10</u> <i>Proposal Writing</i> Writing Assignment	<u>Nov. 10</u> Independent sketching STUDIO BINDER REVIEW w/ INSTRUCTOR	<u>Nov. 13</u> <i>Grading Exercise #1 Placing Slab on Slope</i> FINAL PROJECT: Hand Out RFP	<u>Nov. 13</u> Independent sketching
Week 12 <u>Readings:</u> Land. Arch Ch. 14 & 15	<u>Nov. 17</u> <i>Grading Exercise #2 – Parking Areas and Roads</i>	<u>Nov. 17</u> FINAL PROJECT: Proposal Writing	<u>Nov. 20</u> <i>Grading Exercise #3 Roadways & Drainage</i>	<u>Nov. 20</u> FINAL PROJECT: Submit and Review Proposal with Instructor
Week 13	<u>Nov. 24</u> <i>Site Grading Review</i>	<u>Nov. 24</u> FINAL PROJECT: Program Development / Inventory & Analysis	<u>Nov. 25</u>	<u>Nov. 25</u> FINAL PROJECT: Studio Review & Pin-Up Program Development Inventory & Analysis
Week 14	<u>Dec. 1</u>	<u>Dec. 1</u> FINAL PROJECT: Design Development	<u>Dec. 4</u>	<u>Dec. 4</u> FINAL PROJECT: Design Development
Week 15	<u>Dec. 8</u>	<u>Dec. 8</u> FINAL PROJECT: Final Design	<u>Dec. 11</u>	<u>Dec. 11</u>

	Lecture	Studio	Lecture	Studio
Week 16	<u>Dec. 15</u>	<u>Dec. 15</u> PROJECT DUE 12:00 PM FINAL PROJECT STUDIO BINDER REVIEW w/ INSTRUCTOR (12:30-4:00)	<u>Dec. 16</u>	<u>Dec. 16</u> STUDIO BINDER REVIEW w/ INSTRUCTOR (9:00 – 12:00)

READING LIST AND TEXTS

Landscape Architecture, A Manual of Environmental Planning and Design, 4th Edition
Simonds and Starke

Landscape Graphics, Grant W. Reid

The Case for Sustainable Sites
Available on Sakai Class Site

Guiding Principles of Sustainable Design
Available on Sakai Class Site

OPTIONAL/RECOMMENDED TEXT

Sustainable Landscape Construction, 2nd Edition
Thompson and Sorvig

MATERIALS & SUPPLY LIST

- 3-Ring Binder (1 ½" – 2"), 3-ring hole punch
- Wooden drawing pencils, 2H, H, HB, 2B or lead holder with leads
- Pencil sharpener or lead pointer
- Assorted drawing/drafting pens with a variety of line weights, including sharpie markers, fine point, extra fine point, etc.
- 8.5x11" or 9x12" drawing paper
- Two rolls of Tracing paper, 12" width and 24" width (either white or yellow)
- No. 1 X-Acto Knife and No. 11 X-Acto Blades
- Mat or Utility Knife and blades
- Scissors
- 24" steel ruler with cork backing
- 24" cutting mat
- Adhesives/glues
- Drafting triangles 30-60 and 45-90 (minimum 8"-12"), inking edges recommended
- Circle templates
- 12" architect scale
- 12" engineer scale
- Erasing shield
- Draft dots or tape
- White plastic eraser
- Kneaded rubber eraser