

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY  
School of Environmental and Biological Sciences  
Department of Landscape Architecture  
Introduction to Environmental Design II (11:550:232) | Studio Two (16:550:532)

### **Fragments of Time**

#### **The John A. Roebling Company Kinkora Works, Florence Township, NJ**

Studio Instructors:

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Studio Sessions:      Tuesday 12:10-1:30pm, 2-5pm  
                                 Thursday 2-5pm  
                                 Wednesday 4-5pm (Common Lecture)



*A collage of the houses and former factory buildings of Roebling, New Jersey*

*The Roebling Steel Company, headquartered in Trenton, New Jersey, invented steel cable wire. The company became famous in the 19<sup>th</sup>-century when it used this material in the design and construction of the Brooklyn Bridge. In 1904, the Roebling family decided the company had to produce steel in order to remain competitive, but their land holdings in Trenton, New Jersey could not accommodate the proposed industrial expansion. After a short search, they selected a site four miles south of Bordentown, New Jersey, in the Duchy of Kinkora, and constructed an open-hearth steel furnace, a rod mill for cable wire, research laboratories, machine shops, offices, railroad connections and a company town to house their workers. The Kinkora Works stayed in operation until 1973, when equipment obsolescence, high operating costs, environmental regulations, the OPEC Oil Crisis and a declining stock market forced the closure of the plant. The factory site was subsequently listed as a Superfund Site by the Environmental Protection Agency (EPA), and it is currently under remediation. The town, with its worker row houses, brick duplexes, management mansions, firehouse, banks, school, community center and parks remain. The town of Roebling has commanding views of the Delaware River, is easily accessible by car, and is connected to Trenton and Camden via bus and the Riverline Light Rail. A paved multi-use trail, part of the Delaware River Heritage Trail, connects Roebling to Crystal Lake Park.*

## **Course Description**

Developed as a continuation of LA 11:550:231 and 16:550:531, this introductory environmental design studio uses the design tools of landscape architecture to further explore the concept of site as a terrain of action for environmental processes and social interactions. Exercises and discussions will examine different approaches to site interpretation and design with the intent of illustrating how an analysis of existing conditions, in conjunction with imaginative exploration and an iterative questioning of conceptual ideas and proposed usage, can lead to physically responsive, socially relevant, and visually memorable spatial configurations. During the semester students will manipulate terrain, engage hydrologic processes, examine history, express temporality, define program, and depict the shape and meaning of site through the manipulation of topography, hydrology, plants, and built form.

Questions of interest include: What are the critical ecological and social issues and how are they expressed through landscape design? What are the intended uses of the site and, conversely, how do these uses give rise to unintended but equally valuable uses? What inspires the form of the design? How is that inspiration developed and represented through diagrams, plans, sections, and models? How do past and present conditions inform the design? How will the design change over time, or seasonally? And, perhaps most importantly, as you delve into these questions, how will your initial inspiration change and evolve during your design exploration?

Each of the above questions is answerable, but there is no singular answer. The best design proposals, however, emerge from a blend of hard work, critical assessment, and intelligent creativity. Each of these activities requires the designer to combine an effort to see, listen, and learn with a willingness to adapt, change, and modify.

The course is composed of weekly lectures/discussions and twice-weekly studio sessions. Lectures/discussions present and interrogate theories and methods relating to design; studio sessions facilitate expression of the student's design intentions and provide opportunities to develop critical thinking and creative skills. Studio sessions include historical research and ecological research, design and grading exercises, site visits, individual desk critiques, group pin-ups and project reviews. Students are expected to present thoughts on their own designs, as well as contribute to the conversations related to the work of others.

## **FOR GRADUATE STUDENTS:**

### **Mission Statement**

The mission of the Landscape Architecture Graduate Program is to foster student learning using methods that connect human experience and environmental processes, in order to advocate for environmental stewardship, social justice, and resilient land planning through the design practice of landscape architecture.

### **Program Goals**

- Prepare students for professional careers where they contribute to the development and environmental stewardship of resilient and site-sensitive places based on a foundation of design, science, and scholarship.

- Learn to analyze, comprehend, and design a site based on its spatial quality, terrain and history of place, soil, water and plants, building materials and the expectations and needs of its users.
- Develop criteria for scholarly work and design projects that address and challenge the boundaries of learning and practice of issues associated with climate change, resilience, contamination, and land use planning.

### **Course Goals and Assessments**

- To understand the spatial nature of landscape by means of the following design components in order to provide a foundational framework that will be used in future landscape design explorations:
  - Site Observation and Analysis: Students learn to collect, analyze and synthesize visual, scientific, social and historical information
  - Site Engineering: Students build on foundational knowledge in order to understand and manipulate a site's materials for both form and function (earthworks, paths, roads, basic structures, etc.)
  - Site Design through Hand and Computer-aided Drawing, Drafting and Model Building: Students utilize technical drafting skills to produce drawings (plan, section/elevation, axonometric and perspective) and models that serve as tools to express the spatial and scalar qualities of site design
- To understand the implications of applying this framework to the design of small-scale public and private spaces, and to develop awareness of the relational quality of landscape design that ought to influence decisions that impact the socio-ecological
- Programming for People and Place:
  - Students explore design in order to meet the expectations and needs of clients and other anticipated users, human and more-than-human

### **FOR UNDERGRADUATE STUDENTS:**

#### **Program Learning Goals**

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

- **Explore**...the potential of space and spatial relationships to create socially vibrant and culturally inclusive design solutions.
- **Analyze**...and thoughtfully incorporate nature features and systems to create enduring and ecologically sensitive design solutions.
- **Master**...technical and industry standards to effectively and sustainably foster safe, accessible environments using the materials, methods, and technologies of site design and engineering.
- **Apply**...design principles at large as well as small scales. Develop graphic, written, and oral skills to express thoughts, ideas, and designs.

#### **Course Learning Objectives**

- Students will learn to collect, analyze, and synthesize visual, scientific, historic, and social information.
- Students will acquire technical design skills using landforms, plants, and structures.

- Students will learn to critically assess and revise design proposals.
- Students will develop graphic, written, and oral skills to express their design proposals in a succinct, technically correct, and visually expressive manner.
- Students will develop an understanding of professionalism in the design studio, including the importance of teamwork, respectful interaction with others, completion of assignments on time, and maintenance of clean facilities.

### **SEBS Inclusion Statement**

Students of all backgrounds will be served by this course through an environment of inclusion that respects and affirms the inherent dignity, value and uniqueness of all individuals, communities and perspectives.

### **Course Format**

Design Studio: The course includes the design studio, lectures/presentations, readings, in- studio exercises and project reviews, homework, and mid-term and final design presentations. Much of the course learning will occur in studio. Therefore, active engagement in the studio – during class and while working in the studio during non-class time – is essential. Students are expected to participate in all studio activities, including site visits, Common Lecture, design exercises, 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.**

Readings/Lectures/Presentations: Students are expected to read selected materials prior to class. Required readings will be handed out in class and subsequently posted on the class Canvas site as reference material after the completion of the class discussion. The studio also includes project-specific and topic-based lectures geared toward general knowledge and the technical skills required for studio exercises. You are expected to listen and take notes during presentations and to explore topics independently as suggested by the readings, lectures and subsequent discussions. This applies also to Common Lecture and the spring Cekada Lecture.

In-Studio Exercises, Project Reviews: Studio exercises and project reviews are opportunities to present work, engage in design discussions, respond to questions, consider other interpretations, gather feedback, and explore ideas and issues. To ensure that in-studio reviews are meaningful and productive, students are expected to attend studio and complete all studio exercises within the required time frame. Based on these exercises and reviews, studio instructors will suggest personalized design approaches.

Homework: Completion of homework, and thus daily design development, is part of the studio grade. In addition to providing opportunities to learn required design technical skills, homework provides time for students to reflect upon studio discussions and crits, engage in independent research, and develop and modify designs.

Studio Professionalism: Care and maintenance of a shared workspace and group/individual projects is essential. This means that each student shall demonstrate respect for their particular workspace and projects, as well as for the workspace and projects of others in the studio. Studio Professionalism requires the creation of and participation in a studio community and use of studio space and other shared facilities as outlined below:

The design studio environment should reinforce and deepen the design theories and methods taught by the instructors. Following the professional standards of practice established by the American Society of Landscape Architects, it is expected that students will work together, learn from one another, respect each other's work, and respect the studio space held in common by all. 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. For purposes of safety, **the use of power tools is prohibited in the building, and all spraying of adhesive or paint materials must occur outdoors.** The drafting tables are covered with 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.**

Mid-Term and Final Reviews: Mid-term and final reviews reflect the totality of work completed to fulfill the stated aims of assigned projects. The reviews illustrate a student's understanding of the site and its manipulation to achieve proposed design objectives, and their ability to effectively communicate complex ideas and thoughts to others.

### **Studio Grading/Evaluation**

Grades reflect the student's development of design ideas over the course of the semester, their participation in lectures, discussions, in-studio and homework assignments and pin-ups, studio professionalism, and the mid-term and final reviews. **Steady progress in studio will be rewarded, as will risk-taking and creativity.**

<b>Mid-term</b>	<b>35%</b>
<b>Final</b>	<b>45%</b>
<b>Readings, In-Studio Exercises, Homework, Progress Crits</b>	<b>15%</b>
<b>Studio Professionalism</b>	<b>5%</b>

Mid-Term and Final Review: The grade includes required and self-directed homework, sub-assignments, and presentations. The grade also reflects the student's ability to develop design ideas over the duration of the project; the neatness, legibility, technical accuracy, and express quality of the presentation drawings; and the logical clarity of the written text and oral presentations.

Readings, In-Studio Exercises, and Project Crits: The grade includes required and self-directed work and the ability to listen, follow directions, creatively explore technical issues, and complete projects in a timely manner.

Studio Professionalism: Studio Professionalism will be assessed weekly. The grade includes self-directed work and peer interaction and reflects the ability to complete assignments in a timely manner and maintain a clean, healthy, safe, and collegial workspace.

The following scale applies:

A	90% and above		
B	80% to 86%	B+	87% to 89%
C	70% to 76%	C+	77% to 79%
D	60% to 66%	D+	67% to 69%

### **Departmental Grading Guidelines:**

The assignment of grades is ultimately the purview of the instructor(s), the department uses the following guidelines for appropriate grading in its courses:

**A. Outstanding:** This not only means fulfilling the requirements, but impressing and going beyond the 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 a critical, and constructive manner. Projects and class performance reveal a solid understanding of the issues, related theories, and 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 exceptional. The performance in class displays 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, resulting in an inadequate performance. 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.

### **Expectations of Students**

- Arrive on time, prepared to begin work at the start of each studio session and remain in attendance for the entire class period. **Late arrivals and early departures greater than 10 minutes will be marked as a full absence. Advance notice via direct email to the instructors or self-reporting absence through the University system must be provided in the instance of illness or other circumstances that impact attendance.**
- Complete all studio and homework assignments as directed for the designated due dates. **Late assignments will be marked down one full grade letter for each day they are past due.**
- Be open to the ideas and design challenges that unfold. Contribute to peer learning through conversations and critiques during and outside of studio time. Plan a minimum of 10 hours per week outside of class to read, develop designs, prepare for desk crits, and finalize presentations. Each student is expected to be self-directed and able to pace themselves in order to complete project deliverables within the allotted timeframe.

- Ask questions. Read the syllabus and review the studio schedule in order to be aware of required readings, upcoming lectures, and due dates. Take notes during class presentations and desk critiques to help retain knowledge. The instructor will not repeat any content that was missed due to a student's absence or tardiness. *Therefore, your attendance will be directly related to your success in class.*
- Computers are to be used for class assignments only. **Students are NOT allowed to access the Internet for non-course related topics during class time.**
- **Turn OFF all mobile devices during class time.** Mobile phone devices are not to be used during class time. This includes calls, texting, and movies. Offenses will be reflected in the Studio Professionalism grade.
- Most updates and information will occur during class lectures, but the instructors will also rely on Canvas announcements via email to the students. You are expected to check your Rutgers email regularly.

### 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. It is highly recommended that students keep and store all of the work produced during the semester – including drawing exercises, design development sketches and study models – in a safe place. Please remember to keep your own records (photographs, etc.) of your projects as you go along.

### 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 that cover access to studio, vandalism, table assignments, personalization of workspace, 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.

### Attendance

The Department of Landscape Architecture requires attendance in all of its classes. The individual student's development as a landscape architect is largely dependent upon two aspects of education. The first aspect is the exposure to and assimilation of a body of information that relates to the field. The second aspect is the application of this knowledge through studio projects and problem-solving skills developed through critiques, reviews, and interactions. The Rutgers Landscape Architecture curriculum is designed to develop all of these areas. Attendance and participation in all lectures and studios are essential if the student is to achieve their 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 full step reduction. A minimum level of participation is defined as being in attendance for the entire duration of a class session. Attendance and participation in critiques and reviews is mandatory for the entire term. **Students on academic probation have no allowable unexcused absences.**

## **Required Materials**

A list of basic drafting, drawing and model making materials was provided in conjunction with your first studio and/or drawing class, and you should have these materials available during each studio session. Additional [or replenished] materials you will need for this course:

- Tracing paper (24" roll, \$25 for 50yds.)
- Vellum (24" roll, \$40 for 10yds.) – you may wish to share this cost with a classmate or two
- Prismacolor pencils (3 each of gray, black, red, orange, yellow, green, blue, indigo, violet, approx. \$1.50 each)
- Micron pens (various weights for drafting, approx. \$2 each)
- Sketchbook (you may continue using your sketchbook from previous studio) – this is a tool in which to record design development, observations, and lecture notes (including Common Lecture)

## **Academic Integrity**

The University's policy on Academic Integrity is available at <http://academicintegrity.rutger.edu/academic-integrity-policy>. The principles of academic integrity require that a student:

- Properly acknowledge and cite all use of the ideas, results, or words of others
- Properly acknowledge all contributors to a given piece of work
- Make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration
- Obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions
- Treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress
- Uphold the canons of the ethical or professional code of the profession for which he or she is preparing

Adherence to these principles is necessary in order to ensure that:

- Everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- All student work is fairly evaluated, and no student has an inappropriate advantage over other.
- The academic and ethical development of all students is fostered
- The reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community bears a responsibility for ensuring that the highest standards of academic integrity are upheld.



It is a violation of academic integrity for a student to aid others in violating academic integrity. A student who knowingly or negligently facilitates a violation of academic integrity is as culpable as the student who receives the impermissible aid, even if the former student does not benefit from the violation. As a result, any copying and/or sharing of exercises or projects will be treated as Level 2 violations and is subject to the sanctions as outlined in the integrity policy:

- A failing grade on the assignment
- A failing grade for the course
- Disciplinary warning or probation

### **Accommodations for Students with Disabilities**

#### Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation:

<https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at:

<https://ods.rutgers.edu/students/registration-form>.

### **Student Wellness Services:**

#### Just In Case Web App:

<http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

#### Share A Concern:

<http://studentconduct.rutgers.edu/do-something-to-help-share-a-concern/why-share-a-concern>

There are times when people may observe a behavior and feel concerned. These concerns may be part of a larger story for a student facing challenges. Thus, it is important to ***Do Something*** and share your concerns so that the student can get assistance as soon as possible before the issues grow too large. If the concern is immediate, call 9-1-1.

#### Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ [www.rhscaps.rutgers.edu/](http://www.rhscaps.rutgers.edu/)

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / [www.vpva.rutgers.edu/](http://www.vpva.rutgers.edu/)

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling, and advocacy for victims of sexual and relationship violence and stalking to students, staff, and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Scarlet Listeners

(732) 247-5555 / <http://www.scarletlisteners.com/>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.