

Rutgers—The State University of New Jersey,
School of Environmental and Biological Sciences
Department of Landscape Architecture

INTRODUCTION TO ENVIRONMENTAL DESIGN I COURSE SYLLABUS

11:550:231 5 credits

Monday 3:55-6:55; Thursday, 10:55- 1:55 & Wednesday, 2:15-3:35 & Common Lecture 3:55-5:15 pm @ CDL101
Blake Hall, rooms 244-6

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Office Hours: Before and after studio on Monday/Thursday and by appointment

LEARNING OBJECTIVES

Studio and lecture activities have been developed to accommodate these objectives:

- Introduce core concepts and practices fundamental to Landscape Architecture and Landscape Planning (design process; interpretation of site; human scale and use of the landscape; form-making) PR2-4
- Engage the practice of design as an iterative process and foster experimentation in the making of form. PR2
- Establish vocabularies to describe and analytical frameworks to assess formal aspects of the natural environments. PR3
- Express design intentions through drawing, modeling, recording, and presentation. PR 4

Overview: Introduction to Environmental Design I is the foundation studio for our 2 majors: Landscape Architecture, and Environmental Planning & Design (with four options--Landscape Industry, Geomatics, Urban Forestry and Landscape Planning). The studio investigates how landscape design and planning can shape the built environment purposefully, productively, and provocatively. An introduction to the rigor and language of the environmental design process, as well as the tools, techniques, and creative speculation needed to move through the various stages of that process, it touches upon: aspects of human use of the landscape, plant material in the landscape, and landform (using topographic plans, sections, and contour models).

The course is composed of two weekly lectures and twice-weekly studios. Studio facilitates students in the expression of their design intentions, providing guidance and opportunity to develop critical thinking and creative skills. Studio activities include site visits and analysis, design exercises, individual desk critiques, group pin-ups, and project reviews. Students will draw, craft models, and “make things” each day. In almost all cases, students will leave a given studio with an assignment due at the start of the next studio when it will be discussed with the instructor and among groups of classmates. Each student is expected not only to present thoughts on his/her own designs, but to contribute to conversations about the work of others.

Five projects of increasing complexity introduce students to design as a process: a concept is refined and developed through iterative exploration and revision. Projects and associated assignments engage students in an investigation of: graphic language and representation; the human body and its activities in the landscape; the generation of purposeful form; exercises in material articulation; and the communication of design intent and 3-dimensional form through both physical modeling and drawing techniques. Each student keeps a design journal to complement the learning process; it becomes a record of progress and studio learning.

PROJECT DESCRIPTIONS:

[Project 1]

CRAFTING A 3D OBJECT: Doing it right honors precision in the process of “making” as well as problem solving. Craftsmanship is a discipline more than a destination—your careful investigations result in a more accurate final product. These skills transfer to other aspects of design and work.

[Project 2]

TRAVERSING THE SITE introduces students to the *site visit* and **seeing the landscape** through observation,

recording, analysis and representation. These assignments articulate the **design process**—you learn by doing. As a group, students visit a series of landscapes with varying natural conditions. Qualities of the site are discussed as are methods of recording observations: sketching, photography, measurement, and writing. Three programmatic words characteristic of each of the four sites will be identified and used by the students as focal points for creating 2-dimensional representations of the particular landscape[s] quality. These original diagrams evolve into 3-dimensional abstract structures embodying the defining characteristics of one of the four sites and eventually become a final abstract model that combines site attributes, forms, materials and meaning. A coordinated set of architectural drawings will be prepared including: Plan, Elevations, and Sections. The project also introduces students to the level of model craft and drafting technique expected of them within the class and the majors.

[Project 3]

MAPPING THE FOREST is the first step in the preparation of a management plan and conceptual design interventions for the Rutgers University Ecopreserve formerly known as Kilmer Woods. After an inventory and mapping exercise, you will develop a management plan and visitor service intervention (how people interact with this environment). Your proposal will “knit together” the site with its surrounding landscape.

Questions to consider include:

What species would be appropriate for what purpose?

How would the planting plan facilitate the interpretive/educational purpose?

What will the trajectory of the site be in 10, 20 and fifty years and how will its use be altered?

These questions will be answered in both plan and section diagrams.

[Project 4]

COURTYARD DESIGN is a multi-phased project located on campus that incorporates site, client, and program. Although the project is fairly complex, as a student you understand this dormitory courtyard design project from a client perspective. The project begins with an exploration of the body and landscape to understand the form and proportion of your own body. Site exercises begin with mapping social behavior so you pay attention to how people use this space. Your studies of movement through the site will encompass concepts of time, spatial qualities, and representation techniques explored in the previous projects. Phase 2 begins with the critical site analysis where you will build a group Context Model and diagram site findings. You apply your findings and develop a design concept through a series of three-dimensional study models. Phase 2 integrates the Section drawing as a powerful tool in the site design process, revealing moments of transformation as you develop 2-dimensional drawings that capture the site information contained within the project models. Particular attention is paid to the relationship between representation, form, and meaning and the effective communication of design intention. Courtyard Design [re]emphasizes the translation of an abstract idea/concept into an organizational design framework through analysis, conceptual and measured drawings, and three-dimensional models. The project demands an increasing level of technical skill in draftsmanship and craftsmanship and an understanding of the iterative process of design.

Materials and Supplies

A list of drafting and model making equipment was distributed. Additional material will be required throughout the semester. It is imperative that each student be prepared with the necessary equipment and materials for each studio period. It is not acceptable for students to take time from studio to purchase materials.

Attendance and Grading

- All studio assignments and exercises are due at the beginning of the studio period unless otherwise specified. Late projects will be accepted up to a maximum of one week after due date with a loss of one full letter grade. No credit will be given for work more than one week late.
- Course grading is based upon each student’s personal performance and improvement on studio projects and exercises throughout the semester. Attendance, attitude, participation and overall contribution to the studio environment will also be considered.

GRADING Individual breakdown of your cumulative semester grade (see p. 7 for due dates):

Project 1: Crafting a 3D Object	5%
Project 2: Traversing the Site	25%
Project 3: Mapping the Forest	25%
Project 4: Courtyard Design	35%
Design Journal (60 pages min.)	10%

Note: Project grades include readings and answering questions.

Note: as per Department policy, only one course grade of D is accepted in the major. If a student receives a second D in a 550 course, they cannot progress in the program until one of the D grades is improved.

Final Letter grades will be assigned using the following scale:

x > 90	A
90 > x > 87	B+
87 > x > 80	B
80 > x > 77	C+
77 > x > 70	C
70 > x > 60	D
x < 60	F

The Department of Landscape Architecture uses the following guidelines for understanding appropriate grading in its courses:

A – Outstanding – This not only means fulfilling the requirements, but impressing and going beyond the initial expectations and assigned elements of the project. The student has demonstrated a superior grasp of the subject matter coupled with a high degree of creative or logical expression, individual initiative, and a 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 techniques, issues and related theories, with some additional work completed.

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. 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. 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.

It will be the responsibility of each student to track their own academic progress throughout the semester. Interim grades will be available to students on an individual basis. Students may make an appointment with the instructor to review interim grades. Appointments must be made at least one week in advance of any meeting.

PROJECTS For each “major” project you will receive four sub-grades: design concept and development [how well did you develop your design ideas over the duration of the assignment to meet the stated project goals and provide a creative expression]; drawing craft [the quality of your final drawings]; and model craft [the quality of your final model]; readings and written assignments. Unless otherwise specified in the project description statement, each of the components will be weighted equally. *

HOMEWORK Homework will be assigned at the end of each studio meeting. Typical assignments ask you to make drawings or models. Failing to complete any assignment [for example, developing three alternative designs when four were assigned] or not demonstrating progress in design development [for example, simply re-drawing what was discussed the day before rather than applying the critique to a revised design] will negatively affect your project grades. Specifically, you risk failing the design concept and development component of your grade, and further, the lost opportunity to develop representational skills may contribute to poor drawing and model craft skills.

READINGS Ching, Francis D. & Steven P. Juroszek. Design Drawing with CD Rom (John Wiley & Sons, 1998)

Tufte, Edward R. *Envisioning Information*. (Graphics PR, 1990)
+ Selected readings as pertain to assignments

JOURNAL *Design development (i.e. PROCESS)* should be recorded in a design journal that will be checked weekly by the instructors and will be handed in for evaluation at the end of each project. The journal should engage the processes of site observation and representation as well as lecture notes (including common lecture), your discoveries about design, and the design process.

Remember: you will need to pace yourself and keep up with your journal entries. **You are expected to produce, over the semester, a minimum of 60 pages of thoughtful notes, sketches, diagrams, etc. You may print out photographs and glue them into your journal but *photographs must be annotated* so that we understand what you are seeing with them—so that they communicate.**

ATTENDANCE

*The Department of Landscape Architecture requires attendance in all of its classes. **All course meetings including Lecture, Studio and Common Lecture.*** Attendance at scheduled Studio and Lecture sessions is mandatory. If a circumstance arises which prohibits your attendance at any class session, please notify the instructor 24 hours prior to the class and an alternative arrangement may be made.

There will be no opportunity to make up a missed jury, in-class exercise or lecture.

Grading is based upon the individual's performance and improvement on studio projects and exercises throughout the semester. Attendance, attitude, participation and overall contribution to the studio environment will also be considered. Beyond the above recommendations, this course utilizes the Department's policy on attendance that reads:

*The individual student's development as a landscape architect is largely dependent upon two aspects of education. First, is the exposure to and assimilation of a body of information which 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 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. It is the policy of the Department that **more than three unexcused absences will result in a step reduction of the final course grade** [for example, a B down to a C]. Each additional three absences will result in another step reduction.*

Attendance will be taken at the start of each class and late arrivals of more than ten [10] minutes will be marked as an absence.

SELECTION OF A MAJOR

One objective of this studio is to present to the student the richness of academic careers within majors offered by this department:

- BS Landscape Architecture
- BS Environmental Planning and Design
Options: Landscape Planning, Environmental Geomatics, Landscape Industry, & Urban Forestry

At the end of this semester each student decides upon a major. The department will support your decision through a strong advising suggestion, based on your studio work and your overall performance in 550 and 573 classes. We think of the two majors as a gradient between design and planning and between a more structured versus a more flexible curriculum. Landscape architecture inhabits the creative/ design side of the spectrum (with a rigid curriculum); a more flexible curriculum focusing on planning and policy more than form-making situates Environmental Planning. It has been our experience that most students know by the end of the semester if they want to continue taking a studio course every semester until graduation.

STUDENT WORK

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. A folder made of two large sheets of foam core, taped along one edge will provide an inexpensive and effective means to protect your work. **Please remember to keep your own records (photographs, etc.) of your projects as you go along, as they will become part of your professional portfolio.**

Submitted drawings, models, photographs, or written papers for any project assigned in Landscape Architecture courses are considered the property of the Department and may be retained in its archives for exhibition and accreditation purposes. All projects will be graded and returned to the student at a location designated by the instructor. Should your drawings be retained by the Department for its professional accreditation or for purposes of exhibition, you will be given the opportunity to obtain a print, scan, or photographic record of your work. **Department files are OFF LIMITS to students.**

FACILITIES Studio cannot be taught without reliable facilities. The student is expected to use the facilities responsibly with particular regard to the clearly established rules about their use as specified in the department website.

These rules cover access to the building, vandalism, personalization of working spaces, smoking and drinking, use of lockers, use of department equipment, access to the reference collection, and basic rules governing the use of the studios.

Our studio is shared space. Please strive to maintain a clean workspace by keeping all desks and floors clean and undamaged. Drafting tables are covered with vinyl board covers (Borco) that provide a smooth drawing surface. They can be easily damaged by cutting and paint/adhesive residue. Anyone who damages a drafting surface – by cutting into it, marking it with ink, ruining the surface with adhesive, glue or paint, etc. will be held responsible for the replacement cost of \$150.00.

All spraying of adhesives or paint must take place outside the building. We share this building with Entomology; experiments can be destroyed by using adhesives indoors.

Students may use any one of the lockers located within Blake Hall to store their supplies and equipment; you must supply your own combination lock. Thefts occur, please secure all your valuables

PERSONAL CIRCUMSTANCES

If you encounter any personal circumstances that inhibit your ability to fulfill the requirements of this course, you should contact the Instructor immediately. Likewise, any student with a special need, circumstance or disability should make an appointment with the Instructor during the first week of class.

ACADEMIC INTEGRITY

The intentional copying of another student's file [work] or a portion of a file [work] and representation of the work as your own work is in direct violation of the University Integrity Policy:

Plagiarism: the representation of the words or ideas of another as one's own in any academic work.

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, homework assignments, and projects will be treated as Level 2 violations and subject to the sanctions as outline in the Integrity Policy:**

1. **A failing grade on the assignment.**
2. **A failing grade for the course.**
3. **Disciplinary warning or probation.**

Repeat violations will be treated as separable Level Three violations and referred to the AIF of the school for adjudication. Please refer to the complete Integrity Policy at:

<http://academicintegrity.rutgers.edu/integrity.shtml>.

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.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ 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/

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.

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>.

Scarlet Listeners

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

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

231 SCHEDULE: DRAFT

	LECTURE	STUDIO	ASSIGNMENT	LEARNING OBJECTIVES
WEEK 1 9.7 & 9.8	9.7 What is design + planning? Overview Time Management	PR 1: Pyramid model 9.8	Finish structure; design videos	craftsmanship
WEEK 2	9.14 Creativity: GEHRY VIDEO	Structure Exhibit; PR 2: 9.12 Site Visit—Rutgers Gardens	4 Landscapes Diagrams	Site Analysis
		9.15 Pinup: 4 Landscapes	12 Partis 12 Diagrams; read Tufte	Abstraction; sense of place
WEEK 3	9.21 Design Presentation Muzi Li	9.19 Desk Critique: 3 Models	3 Study Models	Site observation
		9.22 Presentation: 1 composite model	Composite Model, Gehry questions	3d composition
WEEK 4	9.28 Design Process Thomas Young	9.26 Presentation—Drawings	Drawings	3d composition
		9.29 Pinup Drawings*, Revise	Model + drawings	3d to 2d (Models to drawings)
WEEK 5	10.5 Presentation; Workshop	10.3 Working Session	Model + drawings	Craftsmanship, 3d & 2d
		PR2 REVIEW 10.6	Reflection	
WEEK 6	10.12 Rick Lathrop's student	PR 3—Mapping the Ecopreserve 10.10 Site Visit	Mapping Site Information	Fieldwork: Gathering Data & Mapping
	Inventory & Analysis	10.13	Masterplan	Research
WEEK 7	10.19 Frank Gallagher	10.17	Masterplan	Report
	Ecology (Human, Novel)	10.20 HGN	Design Concept	Planning
WEEK 8	10.26	10.24 HGN @ NOLA		Human Scale Design
	Community + Design Rick Lathrop 10.24	10.27	Final Drawings	Visualizing
WEEK 9	11.2 Self-Portraits	10.31 PR3 REVIEW	Gehl reading+ questions	Human body: proportion
	Design Lecture Scott Streeb	11.3 PR 4: Courtyard Design ~Livingston Site visit-- People	Social Mapping	Path & Gathering Places; the body in space
WEEK 10	11.9 12 Poses Catalog Exhibition	11.7 12 Poses Workshop/ Social Mapping Desk Crits HW: Catalog of 12 Poses due 11.9	Social Mapping	Site observation & inventory: People, Privacy, Circulation, etc.
		11.10 Pinup Social Mapping	Lynch "Nodes" reading	
WEEK 11	11.16 Model Workshop/ Site Diagrams	11.14 SITE VISIT: Spatial Analysis	Context Model @ 10 scale	Understand & communicate existing conditions
		11.17 Site Diagrams Pinup	10 concepts (movable)	Design exploration
WEEK 12	11.21 none	11.21 Pinup: 10 concepts	Building Elevation	Design development
Tuesday	11.22 green tech overview: Sean Gallagher	11.22 2 Study Models @ 20 scale	Develop 2 study models	
Thursday	Thanksgiving	11.24 THANKSGIVING		
WEEK 13	11.30	11.28 Pinup: 2 Study Models	Refined Study model @10 scale	Study design in 3d
		12.1 Pinup: Refined Study Model @ 10 scale	Drawings--1 site plan + 2 Section/Elevations	Finalize design
WEEK 14	12.7 Advising	12.5 Pinup: 2 Section/Elevations	Revise Design, Final Model	
		12.8 Working Session	Final Model	
WEEK 15	12.14 Last Day of Class	12.12 Working Session	Presentation Drawings	Communicate Design
		12.14 Pinup; Working Session	Presentation Drawings	Communicate Design
		12.16 Optional Working Session		
FINAL REVIEW		12.19 Final Pinup 3:45	Presentation Drawings	Communicate Design, render