“In landscape architecture, drawing is primarily a means and not an end. When we conceive a drawing as a complete, immutable object, we come unstuck because we sacrifice the openness and the inventive thinking that often result from a focused and critical engagement with process. Drawing integrates the dynamic aspects of idea, medium, process, and the actual environment. In making a drawing, if any one of these is ignored—or alternatively given undue emphasis—we may lose sight of the drawing’s capacity to inform landscape design positively”.

Catherine Dee, “Plus and Minus: Critical Drawing for Landscape Design.”

“Drawing is a verb.”
Richard Serra, Sculptor

Course Description & Goals
A drawing is not just a personal expression but also a tool for observing the world, developing design ideas and exploring spatial issues. The student will learn to depict three-dimensional objects and spaces in a two-dimensional drawing format. Architectural drawings provide an intellectual and analytical way to investigate space, whereas models allow the student to have an experimental, physical, and immediate expression of three-dimensional space.

The student will be introduced to drawing in perspective by sketching from slides and eventually from places. You will become confident drawing trees and landscapes by studying works by grand masters, ultimately depicting larger landscapes with self-assurance. As the term progresses, projects will become more complex. Technical skills, visual skills, and composition will be discussed in theory but learned through practice. You will learn by doing.

Core Learning Goals: AHR-- Engage critically in the process of creative expression
An introduction to drawing that emphasizes spatial communication and pictorial language. Students will:

1. Observe the world to record the built & natural environment.
2. Draft to technical & industry standards
3. Develop familiarity with a range of representation media.

Learning Objectives: Landscape Drawing~ Introductory Sketching and Drafting
Observe the world, develop design ideas and explore spatial issues. Designed as a preliminary drawing course to be taken prior to, or concurrent with, the Introduction to Environmental Design studio. Students will learn to:

Assessment Strategies
1. make freehand sketches that accentuate the three-dimensionality of an object (mass) or a place
2. draft an object to scale and depict it three-dimensionally in two-dimensional drawings (plan-section-elevation-axonometric-perspective).
3. draw an existing building or outdoor space in plan, section, elevation, axonometric, & perspective.
4. gather existing information about a building or space in order to create new drawings (elevations, sections, etc.).
5. make introductory spatial diagrams (figure-ground, etc.)
6. keep a design journal/sketchbook
7. explore different drawing media (pencil, pen, conte crayon, charcoal, ink wash, oil pastels)
8. engage in group critique of classmates’ work

Critiques and discussions about work are an essential facet of the learning process. You will be expected to contribute to the discourse as part of your grade. Additionally, each student is expected to, attend all lectures, studios and reviews, and perform all project expectations in a timely manner.

Course Meetings
Studios Tuesday and Fridays: 9:15 to 12:15 (Rm. 244 Blake Hall?)

Major Project Reviews (Dates subject to adjustment during the semester)
Journal review (March 4th +/- check of progress on journals)
Final drawing & journal review (Due April 28th at last class session)
Project #1: Feb. 28th in studio
Project #2: March 3rd in studio (tentative)
Project #3: March 24th (due in studio)
Project #4: April 14th (due in studio)
Project #5: April 28th (due in studio at last class session)
Note: all other assignments to be finished by Dec 8th (Last day of class for the semester)

Attendance at reviews is mandatory; late projects will not be accepted unless there is an excused absence, and will be penalized a min. of one grade if late. Studio time and participation is critical to success and learning in this course.

Course Grading
(1) Grade Composition
Sketches & Journal 20 %
Drafting Problems & Homework Assignments 15 %
Projects (#1: 5%; #2: 5%; #3: 20%; #4: 25%; Project #5: 10%) 65 %

(2) Major Projects
Each project will be graded based upon:
- Drawing craft (the quality of your final drawings)
- Demonstration that you understand the concepts

Attendance at a review is mandatory. Unexcused absences will be downgraded one grade letter. See Due Date policy, below, for further information.
The final course grade will be based on this scale:

A  > 93  Outstanding
B  > 83  Very Good
C  > 70  Acceptable
D  > 60  Unacceptable
F  < 60  Failure

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, work that, while basically adequate, is not in any way exceptional. This 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 limited effort and poor attendance which may indicate that the student is not in the proper field of study.

(3) Homework
Homework will be assigned at the end of each studio meeting. All homework must be completed and handed in the next class unless there is an excused absence. Late homework will not be accepted.

(4) Attendance
All studio meetings and lectures are required. See Department Attendance policy, below, for details.

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.

Required Books

Studio Materials and Supplies
A list of required and recommended drafting equipment and expendable materials (pencils, papers, etc.) is on Sakai. All required materials should be in-hand the week of Sept. 10.

Studio Expectations
Much of your learning will occur through your active engagement in studio—both during 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 as a community is quickly blurred as you get focused on projects and rely on your peers for perspective and support. You are expected to engage in all activities, including site visits, drawing exercises, projects, pin-ups, and project reviews. You are expected to contribute to the studio’s learning...
process through conversations and critiques during and outside studio time. You should plan to spend 6 hours per week outside of class to read, complete assignments, and finalize presentations.

**Project Reviews:**
Project reviews are opportunities to present your work, respond to questions, consider other interpretations, and gather feedback. You are expected to be at all reviews for the entire period. In order to ensure your full attention, projects will usually be due prior to the day of the review. **If you hand in a project but have an unexcused absence at the review, your project grade will be adjusted downward a full grade step.**

**Homework:**
Project statements outline the final expectations for each project. In addition, new assignments may be given during the studio and lectures as a way to direct your work. Reading assignments are required homework. Students are expected to become increasingly self-directed, beginning to pace themselves to complete the project deliverables in the allotted timeframe.

**Design Journal**
Journal assignments are intended to complement in-class drawing exercises. The design journal should be a running compilation of thoughts, notes, and sketches. A collection of journals can help to reflect on the development of skills and process. Specific journal assignments should be augmented by some independent drawings and observations. Remember, you will need to pace yourself and keep up with your journal entries. **The journal represents a large portion of your final grade. Late assignments will be downgraded one grade step.**

**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 student. **You are expected to check your email regularly regarding postings made to the Sakai website for specific assignments.**

**Use of Facilities and Equipment**
Studio cannot be taught without reliable facilities. But your use of the facilities is dependent upon responsible use 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. Access to the fabrication lab is granted after successfully passing the safety instructions. Access is monitored and can be revoked if students use tools they are not qualified for or if students do not clean after themselves.

**Equipment**
The student handbook also includes a section governing the use of equipment http://landarch.rutgers.edu/current_students/student%20handbook/StudentHandbook_web_SectII.pdf This section includes rules specifying use department equipment including of projection equipment, department cameras, and drafting equipment.

Submitted drawings, models, photographs, or written papers for any project assigned in Landscape Architecture courses are considered the property of the Department. The formatting of all digital submission must follow the department guidelines because they will 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, you will be given the opportunity to obtain a print or photographic record of your work. Department files are OFF LIMITS to students.

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. 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. Unless a more strict policy is in place by the individual instructor, more than three unexcused absences will result in a step reduction in your semester grade. Each additional three absences will result in another step reduction. Since the common lecture is part of the studio, missing that would count as an additional absence.

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 at all required classes and all personal plans should be made in accordance with the schedule. Students on academic probation have NO ALLOWABLE UNEXCUSED ABSENCES. Your attendance at juries or special seminars scheduled in your design course is mandatory for the entire duration of the session.

Due Dates

Exceptions for circumstances truly beyond the student’s control, all assignments are due at the dates and times specified throughout the semester. Projects that are incomplete on the due date should still be submitted on the date it is due to receive at least partial credit. Any work submitted late will be penalized a letter grade for each day past due. Working beyond a due date is both unrealistic in a professional setting and unfair to your classmates in this course.

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 instructor. 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 from one another. It is assumed that all students will respect one another, each other’s work, and the studio space held in common by all. Each student is expected to create every drawing from scratch without copying.

Students are encouraged to work together in the studio outside of class times on their assignments and drawing projects.

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. 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.

Students may also use one of the lockers in Blake Hall to store studio supplies. Students must provide their own combination lock—and, while thefts are rare, they do occur so you should secure your supplies.
Materials for this class are on order at the campus book store on Nichols Avenue, but they will likely sell out. Many of the required studio supplies can be purchased at the bookstore at SEBS, You can visit there or order online from On-line catalogs include Colorest Art in Red Bank on Rt 522, and Blick Art and other stores such as Staples, AC Moore, and Office Max carry drafting and basic art supplies.

These supplies will also be used for design studios if you decide to sign up for one another semester. Each student has the opportunity to store supplies in a locker in Blake Hall (like a typical high school locker). If you plan to use a locker (and you should), you should supply your own combination lock. Sharing a locker can be helpful. Carrying all of your drafting supplies back and forth to class can be a burden. A tube plan carrier or portfolio folder is quite helpful, but not required. Large spring clips also help keep sketches protected in you sketch pad.

For the first week of the semester, students are only required to bring the following items to class:

1) Newsprint pad ( 18 x 24")
2) terra-cotta color conte crayon*( sepia colored chalk)
3) Design journal sketch book

Other materials used in class for these initial meetings will be provided.

**THESE STUDIO MATERIALS MUST BE IN HAND AND READY TO USE IN FIRST CLASS on Jan 17th**

All drafting supplies will need to have been purchased for class on Tuesday Jan 24th. There are no acceptable excuses for not having ALL the required drafting supplies at that time.

*We will be using the drafting supplies in studio class beginning on Jan , 24th*

### Required Studio Materials

**Drafting Tools**

36” to 48” T-Square, preferably metal with beveled edge. Suggested: Lance 42” or 48” stainless steel professional t square (available at Artist Supply & other websites—pretty inexpensive & high quality 36” length is minimum, but is very adequate)

10” Adjustable Triangle; an inking edge is recommended small and large 45 and 30-60 degree triangles

Architect’s 3-sided Scale (plastic or wood & plastic combination) { scales like 1/8, 1/4, 1/2....... Engineer’s Scale, also 3-sided similar to the architects scale, scales like 10,20,30,40,50 etc.

**Compass with Extension arm:** make sure whatever you purchase has a center thumb-screw to open and close the arms and an extension arm for larger circles—you will need this for your first project. A beam compass is also very useful. **An 18” radius or larger is an excellent extended-arm radius.**

Google Alvin Pro Jet-bow Speed Compass 974VK for pricing. Amazon has some—new & used.

Two (2) Lead Holders (plastic or metal—one to use with a hard lead for layout lines, one to use with a softer lead for drafting; note these are different than “mechanical pencils” which are not to be used for this studio)

Lead Pointer (device to sharpen the lead—actually graphite—in lead pointers)

Erasing Shield

Drafting Brush

Circle Template (should accommodate circles ranging from 1/8” - 2 1/4”)

**Drafting & Drawing Supplies ([students can chip in together on leads and conte crayons])**

Leads for use in Lead Holder, 4H, 2H, and 2B (made by Staedtler-Mars or Sanford).
They come in packages of 2's and 12's. Split a 12-pack with a friend.

Conte [brand name] Crayons. "Sanguine XVIII" or "Sanguine Watteau" are the preferred colors: both are deep sepia tones. *Conte a Paris* is a good brand name. Get 3 terra cotta sticks and 3 black sticks (share package)

*Alphacolor* Char-Kole Compressed Charcoal (3 pak) from Utrecht or *Faber Castell* medium or soft (Gray or blacks are fine)

Drafting Dots (much, much better than drafting tape, although either will suffice)

Sand Paper (fine—to sharpen compass leads)

White Plastic Eraser

Kneaded Rubber Eraser

Black drafting pens, similar to sharpies for sketching at various point sizes (Staedler, Micro or Prismacolor)

Prismacolor colored pencils (black, white, dark gray)

**Papers**

Roll of 24" Tracing Paper (buff or yellow; also comes in white, but that can be difficult to read when pinned to studio tack boards)

Tablet of 18" x 24" Newsprint—rough texture (you will use some of this every day in studio)

Roll of 24” drafting vellum (min. length 24 feet) **THE VELLUM IS NOT NEEDED UNTIL ABOUT Oct. 1 Will advise in class**

Journal: 6”x8” *Pentalic a la Modeskin* Sketch Book 6”x8”, in the color of your choice, (available at Amazon) or a 5.5”x8.5” Strathmore Hardbound Sketch book (available at Michael’s). **You should use it in landscape format** (wider than tall).

**THESE SUPPLIES WILL NOT BE NEEDED UNTIL ABOUT 1 month into the Semester and need not be purchased immediately: Will explain in class when the projects approach:**

Black or dark gray Mi Teinte 19.5x 25.5” illustration paper (2 sheets)

PAINTING SUPPLY: Watercolor pad (9”x12” or thereabouts—can share with classmate)

- Higgins black ink (small bottle) (The ink and brushes are needed late in the semester and not for the early work)
- Watercolor brushes (round pointed, flat-top 1”—synthetic sable is fine)

**Miscellaneous Studio Materials (Not required, but helpful)**

- Plastic Drawing Tube (for transporting drawings between home and school is optional)
- 4” 30-60 Triangle (very useful for lettering)
- Trace Clean Pad (helps avoid smearing on vellum drawings)
- Krylon [brand name] "Workable Fixative" (helps to prevent pencil drawings from smudging) OR unscented Aqua Net *

*DO NOT SPRAY INSIDE THE BUILDING!!!!

**REQUIRED BOOKS**

(1) *Francis D. Ching & Steven P. Juroszek, Design Drawing* with CD ROM (New York: John Wiley & Sons, 1998) [Available online or at the RU Bookstore]

Visualization I (Landscape Drawing & Drafting): Calendar

**SPRING 2017** (Tentative Schedule, may be adjusted during semester)

**Week and Dates:**

1: Jan. 17 & 20: *FIGURE-GROUND, 3-D FORM: boxes and chairs, use of charcoal, pencil vs ink, ...sketching basics*

2: Jan 24 & 27: *DRAFTING: drafting tools and equipment, lettering, drafting bands & geometric patterns* (student discovers the underlying geometric order)

3: Jan 31 & Feb. 3: *PLAN & ELEVATION: chairs, block formations*

4: Feb 7 & 10: *AXONOMETRIC: sketching stairwells, block formations, x-y-z coordinates*

5: Feb. 14 & 17: *AXONOMETRIC / Grids*

6. Feb. 21 & 24: *PERSPECTIVE GRID & SKETCHING: sketching ceiling grids; birdseye, one point perspective sketch (begin each class with a perspective sketch or 2, end w perspective grid)*

7. Feb. 28th: *Project 1 Pin Up Pasta in Studio: Pasta Sketch on dark background, Start Proj. 2 Freehand Perspective of RR Station in San Diego, one point perspective done proportionally*

   **March 3rd:** *Start Project 2 RR Station: PERSPECTIVE & SCALE: pin up pasta critique; Start railroad station drafted perspective w tone; (Projects 1 & 2 assigned this week, Perspective of RR Station completed over break)*

8. March 7th: *Pinn up RR Station Proj. #2 due*

   **March 10th:** *BARCELONA: spatial diagrams & Axons (MARCH 11 – 19 Spring Break)*

   **March 21:** *BARCELONA: sections*

   **March 24:** *BARCELONA PIN-UP Due, elevation lecture, Introduce Proj. 4 Voorhees Mall start base map.*

9. March 28: *VOORHEES: SV SITE VISIT TO QUAD / pace space and gather elevation info., (HW = draw plan) SV sketching & elevation information (HW= shadow plan)*

   **March 31:** Voorhees site plans, shadow and start Cross Section Elevations of Buildings

10. **April 4:** *VOORHEES: SV: Spatial diagrams, sketch (HW= sketch) section ppt and drawing (HW= night sketch)*

11. **April 7:** Working session & elevation sketching, color plan rendering (Pencil and markers)

12. **April 11:** VOORHEES project finish up

13. **April 14th:** Voorhees due in studio (Pin UP Projects), Start Proj. 5 Trees and Woods

   **April 18:** *PROJ. 5: TREES & WOODS: bark, trees, woods, ink washes with brushes in studio*

14. **April 21 & 25:** Proj 3 Ink washes

15. **April 28th:** *FINAL CLASS: BIG FORMAT: charcoal and ink wash woods (one small tree or woods sketch each day) (Final Project Presentation in studio, last proj. finished in studio on April 28)*

   All sketch Books, Project 5, and sketch journals all due in final studio.