“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
Sec. 1
Studios Tuesday and Friday: 9:15 to 12:15 (Rm. 244 Blake Hall)
Sec. 2
Studios Tuesday and Friday 12:30-3:35 “

Major Project Reviews (Dates subject to adjustment during the semester)
Journal review (Late October +/- check of progress on journals)
Final drawings & journal review (December 10th at last class session)
Exercises and Homework first half of the semester.
Project #1: Oct 15th in studio
Project #2: Oct 18th in studio (tentative)
Project #3: Nov 5th (due in studio)
Project #4: Nov. 22nd (due in studio)
Project #5: Dec. 10th (due in studio at last class session)
Note: all other assignments to be finished by Dec. 10th (Last day of class for the semester)

Attendance at reviews is mandatory; late projects may 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

(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 January 22nd.

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
Except 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 may 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.
Visualization I (Landscape Drawing & Drafting) : Calendar
FALL 2019  (Tentative Schedule, may be adjusted during semester)

Week and Dates:
1: Sept. 3 & 6: FIGURE-GROUND, 3-D FORM: boxes and chairs, use of charcoal, pencil vs ink, sketching basics

2: Sept 10 & 13: DRAFTING: drafting tools and equipment, lettering, drafting bands & geometric patterns (student discovers the underlying geometric order)

3: Sept. 17 & 20: PLAN & ELEVATION: chairs, block formations

4: SEPT 24 & 27: AXONOMETRIC: sketching stairwells, block formations, x-y-z coordinates

5: Oct. 1 & 4: AXONOMETRIC/ Grids & Landscape Plan Axon

6. Oct. 8 & 11: PERSPECTIVE GRID & SKETCHING: sketching ceiling grids; birdseye, one point perspective sketch (begin each class with a perspective sketch or 2, end w perspective grid)

   Freehand Perspective of RR Station in San Diego, one point perspective done proportionally
   Oct 18th: Start Project 2: RR Station: PERSPECTIVE & SCALE: pin up pasta critique;
   Start railroad station drafted perspective w tone;
   (Projects 1 completed in studio Due the 19th, Proj. 2 due on the 23rd in studio)

8. Oct. 22: Pin-up RR Station Proj. #2 due
   START: Proj. 3 BARCELONA PAVILION: Introduce Proj. 3 statement. Draft plan; shadow plan
   (PROGRESS REVIEW ON JOURNAL WORK)
   Oct 25th: BARCELONA: Axon sheet: Sketch and work progress on Proj. 3 in studio
   (MARCH 16-24th SPRING BREAK)

9. Oct 29 & Nov. 1st: BARCELONA PIN-UP Due, elevation lecture, work on Proj 3 Sections

10: Nov 5th: Proj. 3 Barcelona Due & Tentative date for VOORHEES: Field Trip SITE VISIT TO QUAD /
    gather field data (HW = draw plan)
    Nov. 8th: Voorhees site plans, Finish shadows and start Cross Section Elevations of Buildings 
    (HW= shadow plan)

11. Nov. 12: VOORHEES: SV: Spatial diagrams, sketch (HW= sketch)
    section ppt and drawing (HW= night sketch)
    Nov 15: Working session & elevation sketching, color plan rendering (Pencil and markers)

12. Nov. 19: VOORHEES project finish up (Sections, Sketches)

13. Nov. 22: Voorhees due in studio (Pin UP Projects), Start Proj. 5 Trees and Woods (practice painting)
    Nov. 27 (Wednesday is Friday schedule): PROJ. 5: TREES & WOODS: bark, trees, woods, ink washes
    with brushes in studio

14. Dec 3rd: Proj. 5: Ink washes (all of project 5 is done in studio)
    Dec 6th: Proj. 5 Ink washes in studio

15. Dec 10th: 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 Dec. 10th
    All sketch pads, Project 5, and sketch book journals all due in final studio.)
    No exam in exam period. Final Project 5 is the last class event.
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 Online catalogs such as Utrecht, or Blick Art, include Colorest Art in Red Bank on Rt 522, and other stores such as Staples, Hobby Lobby, AC Moore, and Office Max carry most draftng 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 alligator clips also help keep sketches protected in your sketch pad.

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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) & Black charcoal
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 SEPT. 3rd**

All drafting supplies will need to have been purchased for class on Tuesday, SEPT 3rd. 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 SEPT 10th.***

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**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)
- Circle Template (should accommodate circles ranging from 1/8" - 2 1/4") (Required)
- Architect’s 3-sided Scale (plastic or wood & plastic combination) scales like 1/8, 1/4, 1/2......Scales are an absolute must or you will be at a significant disadvantage in studio.
- Engineer’s Scale, also 3-sided similar to the architect’s 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 sharpener (device to sharpen the lead—actually graphite—in lead pointers)(Required)
- Erasing Shield (Optional)
- Drafting Brush (Optional)

- 10" Adjustable Triangle; an inking edge is recommended, but not required small and large 45 and 30-60 degree triangles (Optional)
**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). (Required)

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) (Required)

*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) (Required)

Sand Paper (fine—to sharpen compass leads) (Optional)

White Plastic Eraser (Required for Ink work)

Kneaded Rubber Eraser (Required)

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

Prismacolor colored pencils (black, white, dark gray) (Required)

**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) (Required)

Tablet of 18” x 24” Newsprint—rough texture (you will use some of this every day in studio starting Sept. 4) REQUIRED!

Roll of 24” drafting vellum (min. length 24 feet) THE VELLUM IS NOT NEEDED UNTIL ABOUT Oct. 15, Will advise in class) (Required)

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). No larger than 8 “x 10” +/- (required)

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

Black or dark gray Mi Teinte / heavy construction paper Approx.: 20 x 24” Illustration paper (2 sheets)

PAINTING SUPPLY: Watercolor pad (9”x12” minimum—can share with classmate) You will need about 12-15 sheets.

Ink wash, varied colors, sepia, browns are best. (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” — inexpensive synthetic sable is fine)

Water pallet for mixing colors

**Miscellaneous Studio Materials (Not required / optional, 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!!!! Do not cut with knives or razors on the vinyl topped drafting tables.

**REQUIRED BOOKS. (Used primarily for required homework exercises for the first half of the semester)**

**BOOK IS OPTIONAL:** Exercises will be provided on line for homework assignments.

(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]