Traditional & Digital Drawing

Project Description

Traditional & Digital Drawing is a 3 credit, introductory-to-intermediate media course, that reinforces and builds upon the representation skills of Spatial and Regional Representation. It is offered for entering Masters students in Landscape Architecture and Urban Design with no prior design experience. It thus supports the overarching mission of landscape architecture and urban design (to prepare students to design environmentally just and socially vibrant landscapes) by giving students the spatial and digital tools to document, describe, and present a visual/verbal thesis on a landscape site.

As a lab-based, technical course, it emphasizes digital skill acquisition and the development of a critical, inquisitive approach to spatial observation and visual communication. Students will demonstrate their retention of lectures, software lessons, and site-based exercises by completing a series of cumulative, graphic assignments. By the end of the course, students will have each created a refined, site-documentation/intervention board(s) and portfolio booklet. Schematically speaking the course will introduce:

- the conventions associated with geographic, urban, and landscape drawings as well as engage students in precedent/visual research (maps, plans, sections, diagrams, perspectives, axonometrics)
- the graphic structures necessary for visual communication (line, color, massing hierarchies, layout grids, negative space, font use/formatting, gestalt theory, etc.)
- the appropriate workflows for creating drawings and models - both drafting, rendering, and assembling - between common digital software (AutoCAD, Adobe Illustrator, Photoshop, InDesign, GIS, and laser-cutting/die-cutting tools)
- the visual tools and research skills to begin analyzing sites, visualizing ecologies, estimating and framing spaces, and creatively capturing material systems, phenomenal intensities, and temporal flux
Just as the larger landscape program focuses on the integration of anthropogenic and ecological forces, this representation course reaches beyond the computer screen to emphasize how space and matter are constructed: corporeally experienced, speculatively imagined, digitally crafted, and culturally interpreted. Moving back and forth, in medium and types of measure/analysis, students are taught to see spatial representations not as the result of mere software packages but rather as generative arguments; translations and transformations that give presence to selective, sited, social, and material systems.

The semester representation project that students will take on is to develop drawings for a hikers’ shelter and/or look-out in the Dolly Sods Wilderness, a high mountain plateau of heaths and bogs defined by its unique ecologies, historic logging, extensive fires, and unexploded ordinance. Using simple diagrams, collaged views, iteratively drafted plans and sections, cut laser models and rendered design drawings, they will propose minimalist facilities as one way to practice/acquire the tools of digital drawing and drafting. This minor design exercise has been chosen to complete their focused work in studio, representing and intervening in the constructed nature of the North Woods.

In working to create a phenomenal frame for hikers to view/engage with the anthropogenic ecologies of the wilderness area, students will engage with media and representation in three layered ways: first, as mentioned above, drawing will be used as a tool integrating human scale, perception, and measured constructions; second, in working on a remote site, drawing will be the medium for interpellation of several forms of site & system information into synthetic & imaginative documentation; third, in taking on the image/concept of ‘wilderness’ as conservation construct and aesthetic ideal, students’ will be expected to reflexively engage the pictorial and pastoral codes of western ‘nature,’ reworking graphics and aesthetics as tools to elaborate the deeper dynamics of anthropogenic disturbance and catalytic generation.

In addition to core media and drawing exercises, students will be responsible for weekly precedent research (via pinterest), occasional reading discussions, and, between mid-term and finals, a short group paper (with drawings) exploring one historical media that spectacularized landscape, with speculations on its critical recovered. Possible topics include: stereoscope slides, red-book propositions, dioramas, panoramas, myoramas, penny pattern books, plein air watercolors, cameras (specific eras, serial uses), camera obscuras, mid-century magazine ads, etc.

**METHODOLOGY**

This course is based on a lab method. In class, instruction will be provided through digital exercises introducing specific digital drawing programs and techniques. Students will be expected to participate in class exercises and, independently, complete a series of creative, graphic assignments to develop their digital representation skills. Public feedback on assignments, through peer and group critique, will occur throughout the semester. At these reviews, students will present their work both visually (in two dimensions) and verbally in order to generate a discussion of the ideas present in the work. Requirements for each of the assignments will be distributed in class and available on google drive.

Broadly the course will begin by building on the plan, section, and collage skills cultivated in Spatial and Regional Representation (in AI, PSD, and CAD) by first, creating imaginative, extractive existing views. Then, over a period of weeks, students will subtly layer additional site/system information into plan form using AI photo tracing, GIS contour imports, and, finally, CAD drafting and modification of grading. Having reviewed the basics of these software packages in documenting and speculating on existing conditions, the second half of the term shall explore intermediate workflows (in AI, PSD, and CAD) for design drafting and development, physical modeling, and presentation rendering. Graphic lesson will be dispersed through-out, aimed at each program’s tools for maintaining orderly layouts, hierarchies of elements, and appropriate composition contrasts/levels of detail.

We will be using Google Drive and Pinterest for scheduling, information, and project submissions. Please sign up for an account (free) and familiarize yourself with each.
**SOFTWARE**

The majority of class time will be spent at the computer, learning the basics of:

- Adobe Illustrator + InDesign + Photoshop + AutoCAD + GIS

In addition to these core tools, students will gain experience with:

- point&shoot digital cameras + scanners + digital die cutters + laser cutting + pinterest + googledrive

All students are expected to install the core programs on their computers. (YES. THERE WILL BE DIGITAL HOMEWORK TO BE DONE OUTSIDE OF CLASS! BE PREPARED! THE LABS HAVE VERY LIMITED HOURS!) Students are also expected to come prepared. See the last page for tools/software/research reading recommendations.

**SCHEDULE / GENERAL OVERVIEW**

**Phs 1:** wk1-3
- Evocative Geographies (Ideographic collages, Illustrator Diagrams, and Topo Sources)

**Phs 2:** wk4-6
- Layered Grounds (Measured Plans, Corrected Contour Models, Design Proposals)

**Phs 3:** wk7-9
- Designed Depths (Design Development, Section(al models), Dimensioned Drawing)

**Phs 4:** wk10-14
- Reflexive Renderings (presentation plans, axons, sections, and views in Adobe)

**Final Review:** wk15
- Date to be determined based on Studio final reviews

**CLASS BY CLASS COURSE SCHEDULE**

**EVOCATIVE GEOGRAPHIES** affective, editorial site introductions

**T_01 09.01**
- COURSE INTRODUCTION + EIDETIC ASSEMBLIES
  - Syllabus Review & Site/Collaborative Team Assignments - See Final Page for Sites & Groups
  - Introduction Composition + Basic Photoshop Review
  - *Current Studio work: Photo Sections and Elevations*

  **Assignments:**
  - Pinterest Account registration + 10 posts: site collages - graphic emphasis
  - Eidetic Assembly (5 + scenographic layer collages)

  **Optional Reading:**
  - James Corner, Eidetic Imaging

  **Software + Graphic References:**
  - Ellen Lupton, Graphic Design; the New Basics.
  - Cantrell & Michaels, Chp 2-5, 7.

**T_02 09.08**
- ARTICULATING HIERARCHIES + HYBRID VIEWPOINTS
  - Introduction to Composition II + Basic Illustrator Review
  - *Current Studio work: Site Survey Fieldwork (to Plans, Sections, Elevations & study model)*

  **Assignments:** (2 weeks to complete)
  - Pinterest 10 posts: hybrid drawings - orthographic & perspective mash-ups
  - Hybrid Views: Collage + layered illustrator plans; keyed + eco annotations

  **Optional Reading:**
  - Jakob von Uexkill, Excerpts on Umwelts

  **Software + Graphic References:**
  - Cantrell & Michaels, Chp 10, 11, 13, 14.
No Class 09.15, 09.22  
Detroit Trip/Break in Academic Calendar

Collaborative Team Review
Open CAD in your groups and review the program interface, basic layer options, and image attachment vs. block insertion workflow

T_03 09.25
INCORPORATING CONTOURS
Contour Drawing Conventions, Sources + GIS-AI-DWG file transfer workflows
Current Studio work: Isometric projections (axons) and Site Intervention

Assignments:
- Pinterest 10 posts: creative contour maps
- Contoured Composite in AI + Contoured Composite DWG

Optional Reading:
- Jill Desimini, Cartographic Grounds (Places Slideshow)

Software + Graphic References:
- GIS-DEM workflow - Harvard Print Tutorial

T_04 09.29
CONTROLLED DRAFTING
CAD - File Management & Units, Osnaps +, References, Line Drawing & Modification
Current Studio work: Isometric projections (axons) and Site Intervention continue

Assignments:
- Pinterest 10 posts: samples of working & presentation surveys, any scale of topo
- 1 CAD plan: incorporating AI linework + GIS contours, terrace (ungraded), sportsfield

Optional Reading:
- Ian McHarg, Excerpts from Design with Nature

Software + Graphic References:
- CAD 2013 Manual (pdf will have sections bookmarked with applicable weeks)

T_05 10.06
THICKENED PLANS
Simple contour Edits + CAD - Modifications, Model/Paper + laser cutting workflow
Current Studio work: Isometric projections (axons) and Site Intervention continue

Assignments:
- Pinterest 10 posts: edge details (built articulations) & cut contour models
- 2 CAD plans - working plan of 2’ contours from 10’ DEM, terrace graded + laser file
- 1 laser-cut model: chipboard model (1”=20’ w/ 2ply) of 10“x10” each.

NOT FOR SUBMISSION -
begin sketching variations on your graded framing/shelter ideas to further highlight ecological dynamics, anthropogenic impacts/indexes and effects

Optional Reading:
- 306090 on Models

Software + Graphic References:
- CAD 2013 Manual
- Shop Template Instructions
SKETCH IDEAS + PRECEDENT PRESENTATION
Intro of Media/Medium Analysis Project
InDesign Basics Review for precedent booklet (later board and term portfolio layout)

Current Studio work: Isometric projections (axons) and Site Intervention continue

Assignments:
- Pinterest 10 posts: precedent layouts
- 1 Booklet - Group spreads on area ecological dynamics
  + Individual spreads on design, framing inspiration + sketches

Software + Graphic References:
- InDesign Tutorial

DIFFERENTIAL DESIGN ELABORATIONS
digging into the third dimension at human scale

Current Studio work: Isometric projections (axons) and Site Intervention continue

Assignments:
- Pinterest 10 posts: edge details (built articulations) & CD documentation
- 1 completed plan drafted and plotted with legible lineweights, hatches, + block labels

Optional Reading:
- A History of poshe + details (TBD)

Software + Graphic References:
- CAD 2013 Manual

(CSERIAL) SEQUENTIAL SECTIONS

Current Studio work: Mapping, GIS, & Combined Booklet

Assignments:
- Pinterest 10 posts: section models, serial sections, & CD section details
- 1 set of sections, cut every 5’ from 20’ on either side of your shelter (20 min.) + detail
- 1 lateral section (min)
- 1 model- from the laser cutter- built from these vertical slices every 5’
  (use 1”=20’ again, cut 2 pieces of single ply cardboard for each section)

Optional Reading:
- Pevsner + Carlisle, The Performative Ground or Alpers, The Mapping Impulse (TBD)

Software + Graphic References:
- CAD 2013 Manual

EXACTING ARTICULATIONS (DIMENSIONS, TEXT)

Current Studio work: Programmatic Thesis Statement

Assignments:
- Pinterest 10 posts: tectonic design details (see spanish, mediterranean craft trad.)
- 3 versions of finalized plan plotted- for ai, CD-set, layers seperated for axo
- 2 versions of 2 sections (at key details), plot for each: for ai section-elev, for CD-set
Optional Reading:
Robin Evans, Post-Modern Geometries

Software + Graphic References:
CAD 2013 manual

**REFLEXIVE RENDERINGS** workflows for presentation production

**T_10 11.10**

**BASIC PLAN RENDERING + REVIEW OF SCHEDULE, DRAFT DEADLINES/FEEDBACK**

AI workflow for CAD plan rendering

*Current Studio work: Science Fair*

Assignments:
- Pinterest 10 posts: minimally rendered plans
- 1 illustrated plan
- 1 draft layout of your final course portfolio

Optional Reading:
- No Reading, Work with your Media/Medium texts

Software + Graphic References:
- Cantrell & Michaels, Chp 18-21, Chp 24.

**T_11 11.17**

**SIMPLE 3D DRAWINGS**

PSD + AI + models - easy views + easy axons

*Current Studio work: PostCard Pin-Up*

Assignments:
- Pinterest 10 posts: axons & collages model views
- Axons are not required, but appreciated
- 1 view of your intervention, built atop model photos
- 1 view of your studio intervention for postcard pin-up

Optional Reading:
- No Reading, Work with your Media/Medium texts

Software + Graphic References:
- Cantrell & Michaels, Chp 16, Chp 27-28
- Axon & Perspective Handout from Graphic Standards

**T_12 11.24**

**DUAL SECTIONS RENDERING**

PSD + AI - section-elevation workflows, residual PSD adjustments, lighting Q&A, symbols

*Current Studio work: Final Review Production*

Assignments:
- Pinterest 10 posts: immersive sections & annotated sections
- 1 annotated section at 1/16"= 1’ or 1/20"=1’ to match models and topo work
- 2 immersive section-elevations (from a new angle)- emphasize temporality

Optional Reading:
- No Reading, Work with your Media/Medium texts

Software + Graphic References:
- Cantrell & Michaels, Chp 7, 23, 24

**T_13 12.01**

**WORKING SESSION Individual Drawing and Portfolio Layout Desk Crits**

Sign-up for Office Hours meeting on your working Media/Medium Draft (due 24 hours before Office Hours)
TRADITIONAL + DIGITAL TRADIGITAL DRAWING

T_14 12/08* WORKING SESSION Individual Drawing and Portfolio Layout Desk Crits
T_15 12/15* Final Review and Working Session Dates tbd by studio schedules

GRADING CRITERIA:

GENERAL BREAKDOWN:
Grading for the class will be determined according to the following criteria:

- PARTICIPATION & PINTEREST & DISCUSSION 10%
- DRAWING ASSIGNMENTS 80%
- MEDIA/MEDIUM ANALYSIS 10%

WORK WILL BE GRADED BASED ON THE FOLLOWING:

Completeness: Instructions carried out in detail

Technical Skills and Attention to Detail: Assignments executed with the appropriate method and knowledge of technique? Student shows proficiency in the various media skills?

Accuracy and Presentation: Assignments completed with precision and presented professionally?

Effort and Concept: Student iterates through multiple drafts and shows evidence of experimentation and improvement during the assignments? Concepts are clearly articulated and well developed. On a broader scale, student shows consistent effort and improvement over the course of the semester.

Incompletes: There will be no Incomplete given for a course except for a documented medical excuse at the discretion of the instructor. You are required to attend all classes and be present in the classroom during the allocated times. Absence need to be notified as mentioned in the paragraph above in schedule.

Attendance and timely submission of assignments: More than two unexcused absences in a course will result in a failing grade (two absences is equal to over 13% of total class time). Late assignments (including work for pinup or review) will not be reviewed for a grade. Each student must turn in what is completed or receive a failing grade for the particular assignment. Names of groups and individuals should be clearly indicated on all assignments.

!!! WE START ON TIME, PLEASE BE IN CLASS AND READY TO DISCUSS AT 9am !!!
Students who are not in class and ready to participate at 9:05 will be marked late. Three lates will equal an unexcused absence.

GRADING STANDARDS CONFORMS TO CCNY 2008-2010 GRAD BULLETIN:

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<th>Explanation (refers to class performance)</th>
<th>Quality Points</th>
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<td>A</td>
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EDUCATIONAL GOALS

Traditional and Digital Drawing, as the initial design representation course, initiates students into a critical awareness of spatial inhabitation, perceptual and material intensities, scalar thresholds, and digital, graphic communication.

Educational goals in this course include the development of the following list of skills and concepts:

- Visual Literary
- Critical Thinking
- Software Facility (AutoCAD, Adobe Illustrator, InDesign, and Photoshop, CCNY lab procedures)
- Visual communication

LEARNING OBJECTIVES

The learning objectives are developed from the above educational goals, and include the following actions and activities through which these specific skills and concepts are conveyed to the student.

VISUAL LITERACY is developed through analytic engagement with precedents, site circumstances, and peer work, including annotation, framing, selective editing, and group review of competition boards, site photographs and surveys, lecture samples, and daily assignments.

CRITICAL THINKING is enhanced through the development and recursive revision of both analog/digital graphics and verbal presentation to cultivate precise yet abstract thinking, thoughtful editorial choices, the intelligent establishment of visual arguments and consistent, cohesive graphic structures.

SOFTWARE FACILITY is developed through cumulative lessons and exercises, building from singular program use to a final project incorporating synthetic site documentation, annotated collage documentation, drafting, and renderings across AutoCAD, Adobe Illustrator, InDesign, and Photoshop, utilizing best practices file management and standard lab printing procedures.

VISUAL COMMUNICATION is enhanced through the critical use of the tools of representation, including drawing (digital and manual) and the layout of boards, drawings, and digital presentations.

USEFUL REFERENCES

SOFTWARE (LINKS)

AutoCAD 2015 (on lab computers, install on your machines),
free educational pc version here: http://www.autodesk.com/education/free-software/autocad
free educational mac version here: http://www.autodesk.com/education/free-software/autocad-for-mac

Adobe Suite CS6 (Illustrator, Photoshop, InDesign) (on lab computers),
educational versions / trial here (subscriptions): http://www.adobe.com/creativecloud/buy/students.html

ArcMap 10.2 (on lab computers),
student versions (annual license) will be available during the semester

MATERIALS LIST

- sketchbook for notes, doodles + trace (18") for overlay drawing
- a flash drive (8G or so) for incidental file transfers or maintaining space on ‘the cloud’ (min 1-2G for term docs)
- your smartphone for photos
- your CUNYFirst EMPLID for access to lab computer accounts
- cost of printing in lab + model materials: 2ply cardstock, 1/8” thick cardboard (do a group order from Artist Supply or Dick Blick)
- enthusiasm
OPTIONAL READINGS

all readings will be posted to google drive

SOFTWARE REFERENCES

copies on google drive:
AutoCAD users manual (2013)
Ellen Lupton, Thinking with Type (New York: Princeton Architectural Press, 2004/10).
and
Miscellaneous Software ‘Cheatsheets’.

SITE ASSIGNMENTS AND COLLABORATIVE TEAMS

site photos, klm (google earth points), ecology/history articles, dem (gis) are posted to the drive

RED RIVER FALLS + 2ND GROWTH RED-SPRUCE/EROSION AREA (site 1)
Robynne Heymans
Thomas McElhenney
Alissa Shipp
Hiu Wing Tang
Nora Hadaf

BEAR ROCKS (OUT-CROPS) + HUCKLEBERRY HEATHS (site 2)
Jacqueline LeBoutillier
Kenia Pittman
Nicole Anne Keller
Antti Moelsae
Maja Råby

SPAGNUM SODS + UPSTREAM MEANDERS/MEADOWS (site 3)
Kate Jirasiritham
Babbie Dunnington
Craig A Shaw
Veronica Tyson-Strait
Sarah A Toth

ROCKY HEATHS/BALDS + EDGE BRACKE-ASPEN GROVES (site 4)
Anna Ceraulo Jalazo
Sivan Weizmann
Elizabeth A Gilchrist
Margaret Mulligan

MEDIA/MEDIUM OPTIONS

handout to be distributed in class