



Professors: xxxxxx
Email: xxxxxx

xxxx Semester 2013
Office: XXXX

DESIGN I : FOUNDATIONS : ARCH 1110

3 credits: 6 lab/studio hours

Course Description: Architectural Design I: Foundations is the first course in the one-year foundation sequence which increases the student's ability to perceive visual cues, create visual design, formulate concepts, and render ideas in two or three dimensions. Students will use a combination of hand and digital skills to aid in the creation and interpretation of three dimensional objects and space, and the delineation of the same using standard projection systems.

Course context: This course is a required first step in the Design Studio sequence.

Prerequisites: None

Co-requisites: ARCH 1191 Visual Studies I

Required Text:

In the form of a reader:

1. Hannah, Gail Greet. Elements of Design: Rowena Reed Kostellow and the Structure of Visual Relationships, pp.44-57.
2. Elam, Kimberly. Geometry of Design. Pages 44-75.
3. Durer, Albrecht. Of the Just Shaping of Letters.
Web URL, PDF: <<http://sean.gleeson.us/2006/03/08/durers-crazy-idea>>
4. Benedict, William. ARCH 121 SYLLABUS. Pages 29-40.

Recommended texts:

Benedict, William. Base, 121, 122, 123 Syllabi, Drawing Form, Creating Relationships. San Luis Obispo, CA: El Corral Publications, 2007. PDF. <www.williambenedict.com>

Ching, Francis D.K. Architecture: Form, Space, and Order (latest edition). New York, NY: John Wiley & Sons, Inc., 1996 (or most recent). Print.

Elam, Kimberly. Geometry of Design: Studies in Proportion and Composition. New York, NY: Princeton Architectural Press, 2001. Print.

Hannah, Gail Greet. Elements of Design: Rowena Reed Kostellow and the Structures of Visual Relationships. New York, NY: Princeton Architectural Press, 2002. Print.

Yee, Rendow. Architectural Drawing: A Visual Compendium of Types and Methods. New York, NY: John Wiley & Sons, 2007. Print.

Required Tools:

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|--------------------------|------------------------------|-----------------------------|
| 1. Lead Holder | 13. 12" Alvin Rolling Ruler | 21. Drawing Transport Tube |
| 2. Lead Holder Sharpener | 14. Alvin Adjustable Compass | 22. Art Bin/Tackle box |
| 3. Leads: 2H, HB, H, 2B | 15. Olfa Knife OR | 23. 12" White Tracing Paper |

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| 4. 12" and 3" 30°/60° Triangle | 16. #11 X-Acto Knife & Blades | 24. 11"x17" Vellum Pad |
| 5. 12" and 3" 45° Triangle | 17. 18" Metal Ruler w/ Cork | 25. 11"x17" Mylar Sheets |
| 6. White Eraser | 18. Super Glue | 26. 8 ½"x11" Sketch Paper |
| 7. Erasing Shield | 19. White Glue | 27. 8 ½"x11" Sketch Book |
| 8. 12" Architect's Scale | 20. French Curves | 28. 8 ½"x11" Sheet Protectors |
| 9. Prismacolor Color Pencils: Black, 20%, 50%, 70% Gray, White | | |
| 10. Faber-Castell Permanent Black Ink Pens: S, F, M Weights | | |
| 11. 9"x12" Self-Healing Cutting Mat | | |

Items may be purchased at:

Pearl Paint. 308 Canal Street (Manhattan) (student discount with ID)
Utrecht. 536 Myrtle Avenue (Brooklyn) / 111 Fourth Avenue (Manhattan) / and other locations
www.dickblick.com

Attendance Policy: No more than 10% absences are permitted during the semester. For the purposes of record, two lateness are considered as one absence. Exceeding this limit will expose the student to failing at the discretion of the instructor.

Course Structure: This course is the first design studio which will include lectures, student presentations, guest critics, in-class workshops, and charrettes. The students will be given problems in a week to week sequence. Each problem will involve a cyclical iteration of the design process in which new skills in a variety of media will be acquired. Students will give verbal and graphic presentations of their designs which will demonstrate agility with vocabulary, concepts, and result in a critical class discussion to assess quality of the work. Work will be completed both in and outside of class. Written evaluation for each week will be provided by the professor and fellow classmates. Students should keep record of their own progress in a spreadsheet.

Learning Objectives

Upon successful completion of this course, the student will:

1. **Implement** an iterative design process from problem identification, information gathering, solution generation and evaluation, implementation, presentation, and overall project evaluation. (Knowledge)
2. **Incorporate** design concepts and vocabulary into design process and presentations. (Knowledge)
3. **Distinguish** between media and **determine** the appropriate method and media required to complete a drawing or model. (Gen Ed)
4. **Communicate** ideas and information both verbally and through writing. (Gen Ed)
5. **Develop** and **apply** professional vocabulary. (Gen Ed)
6. **Produce** orthographic, axonometric, perspective, and architectural vignette drawings. (Skill)
7. **Utilize** analogue and digital media to create drawings and models. (Skill)

Grading:

Class Participation	10%
Sketches Assignments	5%
Projects: Drawings/Models	75%
Course Portfolio	10%

Note: Projects will be graded on: following instructions, craftsmanship, neatness, creative use of materials, linewights and presentation.

Digital File submission: All digital files must be named with the following convention:

example: Trudell_F11_ProjectName_Timur-Karimov (01).jpg

Professor's Last Name, underscore, semester letter (Winter, Spring, Summer, Fall) and last two-digits of the year, underscore, student's first name, hyphen, student's last name, space, parenthesis with photo number (if you have more than one image for this student), dot file extension.

Name all files before uploading to blackboard and/or submission to instructor.

Academic Integrity: Students and all others who work with information, ideas, texts, images, music, inventions and other intellectual property owe their audience and sources accuracy and honesty in using, crediting and citation of sources. As a community of intellectual and professional workers, the college recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and is punishable by penalties, including failing grades, suspension and expulsion.

Course Portfolio: At the beginning of each semester, students will prepare a digital portfolio with each exercise carefully documented and presented. You will be required to make printouts of your portfolio at regular intervals for review and discussion. Students must keep track of their own progress in this way.

WEEKLY SKETCHES

Weekly sketches will be completed per semester as homework. Each sketch has a clearly defined focus and method such as blind contour form study, positive and negative space, shade and shadow, texture, light, depth, perspective, and scale. Sketches will explore a variety of paper and drawing media. Thumbnail study sketches should be completed in a sketchbook prior to preparing the final sketch on 8 ½"x11" paper. Hand letter on the back of each sketch the intention, time it took to complete, and the location.

WEEK 1:

Lecture: RECTILINEAR FORM: Identify axis in rectilinear forms and recognize hierarchy and dominance of volumes based on proportion. Group forms to create a visually pleasing unified object.

Lab & Homework: EXERCISE 1

1. Construct nine (9) rectangular volumes of white clay of varying sizes, but all smaller than 4" in the greatest dimension.
2. Identify dominant forms, subdominant forms, and subordinate forms. Identify the dominant axis of each volume.
3. Assemble groupings of 3 rectangular volumes (a total of 3 groupings) and secure to a ½" thick foamcore base.

Reading: Hannah, Gail Greet. Elements of Design: Rowena Reed Kostellow and the Structure of Visual Relationships, pp.44-57.

WEEK 2:

Lecture: DELINEATING RECTILINEAR FORM: Represent 3-D form in 2-D drawings which communicate depth and relationships between parts. Present and review Exercise 1.

Lab & Homework: **EXERCISE 2**

1. Work with one of your groupings from the previous exercise. Construct multi-view drawings of your grouping by tracing freehand over drafted construction lines.
2. Indicate the dominant, subdominant, and subordinate forms graphically. Label and dimension the axis of each volume. Indicate the ratio of length to width.

WEEK 3:

Lecture: **BASIC PATTERN RECOGNITION:** Identify attributes of an illustration and record their properties and affect. Present and review Exercise 2.

Lab & Homework: **EXERCISE 3**

1. Identify the basic pattern areas in an illustration (magazine or architectural lecture series poster) by outlining their contours on tracing paper.
2. Positive vs. Negative space drawing: Place a piece of trace over the image and isolate what is an object vs. what is the space around it
3. Outline and Boundary drawing: Place a piece of trace over the image and draw ONLY those things you can identify as an edge.
4. Texture and Pattern drawing: Place a piece of trace over the image and draw ONLY those things you can identify as a texture or pattern
5. Create two 11"x17" plates. The first plate should include the original image distributed in class plus the Positive vs. Negative Space. The second plate should hold the Outline and Boundary plus Texture and patten drawings. Add Titles and labels as necessary, remember that text is also a design element on the page and should reflect the ideas that you are attempting to support in your analysis.

WEEK 4:

Lecture: **BASIC GEOMETRY RECOGNITION:** Identify underlying geometries and proportions of an illustration. Present and review Exercise 3.

Lab & Homework: **EXERCISE 4**

1. Using the same illustration as the previous exercise, identify and highlight the overall organizing geometries of the page and its' objects by overlaying layers in Adobe illustraor on the formatted 11X17.
2. Use the software to highlight critical areas or line work. Emphasize proportions, or golden sections and other geometries you identified in your analysis. Use 1-2 colors and multiple line weights to indicate hierarchy, rhythm, repetition, transparency and other compositional elements.
3. Create a full page 11x17 pattern based on the geometries extracted in the analysis
- 4.

Reading: Elam, Kimberly. *Geometry of Design*. Pages 44-75

WEEK 5 & 6:

Lecture: **DURER'S ALPHABET:** Understand geometric proportions described in written form to draft an accurate representation through multi-view orthographic and paraline drawings. Present and review Exercise 4.

Lab & Homework: **EXERCISE 5**

1. Based on Albrecht Durer's written description, choose a letter of the alphabet and construct a precise and perfectly proportioned drawing. Preserve your construction lines.
2. Imagine the letter was extruded to fit a 4" cube then draw all 6 sides of the object. Draw a plan oblique view and a set of multi-view drawings (including sections) of the letter and add shading.
3. Reconstruct your 6 orthographic drawings in vector graphics software (Adobe Illustrator), and add line weights for construction lines and final lines. Students may scan hand drawings and scale appropriately in software.

Reading: Durer, Albrecht. *Of the Just Shaping of Letters*.

Web URL, PDF: <<http://sean.gleeson.us/2006/03/08/durers-crazy-idea>>

WEEK 7 & 8:

Lecture: **GRIDS/CUBE PART 1:** Use geometric proportions to derive a 6-sided form which addresses a given use. Present and review Exercise 5.

Lab & Homework: **EXERCISE 6**

- 1 Set up 6 - 4"x4" boxes on a sheet of vellum. In each box you will develop a different grid system based on rhythm and proportion as discussed in class. Tools : Autocad & Illustrator. Label proportions and repetitions. Use layers in Adobe Illustrator to create transparencies and levels in the grid.
- 2 Apply each of the "rendered" 4"x4" grids to a 4" foam cube. Carefully consider how the lines wrap around the volume. Consider what happens to spaces in between the grid lines, at the edges and at areas with varies level indicated by the transparent or gradient fills.
- 3 Cut into the foam cube based on the lines of your grid. Use appropriate tools to get precise and detailed cuts per your 4"x4" grid drawing.
- 4 Take 3 high quality photos of each foam model. Pay close attention to light, shadow to highlight your forms. Each photo must fill an 11x17 page.
- 5 Create a 2D hand drafted multi-view drawing of your cube with shading to indicate depth on vellum.

WEEK 9:

Lecture: **CUBE PART 2:** The exploded sectional isometric

Lab & Homework: **EXERCISE 7**

- 1 Create an exploded isometric sectional drawing of your cube.
- 2 First draw an isometric of your foam cube.
- 3 Select sectional cuts approximately 1/2" from the surface of each face.
- 4 Use lineweights, hatching and colored lead to identify the cross sectional areas.
- 5 Use construction lines and heavy dashed lines to extend (explode) the section cuts away from the cube to illustrate the section clearly.
- 6 Final drawings should be on vellum paper sized to show all six sectional cuts clearly and with no overlaps on the original cube at the center of the drawing.

Reading: Benedict, William. *ARCH 121 SYLLABUS*. Pages 29-36.

WEEK 10/11:

Lecture: **CUBE PART 3:** Photomontage.

Lab & Homework: **EXERCISE 8**

- 1 Using the photographs of your cube, you will select and photograph an appropriate physical site and insert your photograph. Use the photoshop tools to visually blend your cube into the scene. This is not to create a photorealistic insertion, but a visual approximation of siting your cube.
- 2 Using digital model of your cube from visual studies perform the same exercise above in an entirely different site to create a new scene. Adjust the digital model as needed to match perspective lines and shadows
- 3 Print both photomontages on no less than 30"x30" paper. Use the full extents of the paper.

Reading:

WEEK 12, 13 & 14:

Lecture: CUBE PART 4: PERSPECTIVE: Learn how to construct a perspective from a plan and elevation.

- 1 Using your foam models to help visualize, create perspective views of moving through the spaces in your model.
- 2 Each perspective must show construction lines with technical components labeled (VP, PP, SP etc). Vary the location of the station point, picture plane or horizon line to create dramatically different views.
- 3 Draw your perspectives on vellum paper, appropriately sized to show all the required components.
- 4 Add shade, shadow and entourages to give scale and visual interest.

Reading: Benedict, William. ARCH 121 SYLLABUS. Pages 43-48.

Reading: Yee, Rendow. Architectural Drawing: A Visual Compendium of Types and Methods. Selected pages between: 181-303 and 367-425.

WEEK 15:

Lecture: FINAL PRESENTATION: Final pin-up and presentation of all cube exercise. Verbal presentations by students with a review jury of at least one outside critic. Written feedback on student performance completed and distributed.

Bibliography:

Hannah, Gail Greet. Elements of Design: Rowena Reed Kostellow and the Structure of Visual Relationships. New York: Princeton Architectural Press, 2002. Print.

Lupton, Ellen and Jennifer Cole Phillips. Graphic Design: The New Basics. New York, NY: Princeton Architectural Press, 2008. Print.

Theil, Philip. Visual Awareness and Design: An Introductory Program in Conceptual Awareness, Perceptual Sensitivity, and Basic Design Skills. Seattle: University of Washington Press, 1983. Print

Zell, Mo. Architectural Drawing Course: Tools and Techniques for 2D and 3D Representation. Hauppauge, NY: Barron's Educational Series, Inc., 2008. Print.

I have read and acknowledge the above written syllabus for Arch 1110: (Your Full Name)
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