Department: Architecture

Course Number and Title: ARCH 052 - Architectural Graphics: Advanced Rendering

Length of course in weeks: 16
Units: 3
Total Class Hours/Week: 6
Lecture Hours/Week: 2
Lab Hours/Week: 4

Grade Type: Grade/Credit/No Credit

Catalog Description: This course is a study of three-dimensional representations using various color media as it relates to architectural and environmental graphic communication. Students have opportunities to develop visual color literacy, three-dimensional drawing techniques, and an understanding of color rendering. This course covers natural and human-made forms and advanced architectural color rendering.

Schedule Description: This course is a study of three-dimensional representations using various color media as it relates to architectural and environmental graphic communication.

Recommended Preparation:
MATH 103, Elementary Algebra or
MATH 103R, Elementary Algebra

Course Outcomes: Student Learning Outcomes

1. Outcome: Students will be able to critically evaluate color renderings.
   Assessment: Student evaluations of their own work and the work of others in the field.

2. Outcome: Students will demonstrate color-rendering skills that represent the theory and practice of perspective and architectural color rendering.
   Assessment: Student-produced color drawings and sketches organized in a personal sketch book of at least 100 pages.

Course Objectives: Upon completion of this course the student should be able to:

1. Apply fundamental principles of perspective drawing and color rendering.
2. Use theories of shades and shadows through the basic application of descriptive geometry.
3. Use different color media such as colored pencil, pastels, watercolor, and opaque color suitable for expression of forms, values, materials, and textures in an architectural rendering.
Assessment: Students in this course will be graded based on the following four categories:

1. Writing Assignments: reading report(s)
2. Problem Solving Demonstrations: exams and homework problems
3. Skill Demonstrations: class performance(s) and exam performance(s)
4. Examinations: completion and sketch book

Repeatability: 1 time

Methods of Instruction: Lecture & Lab

Lecture Content:

1. Black and White Media: Pencil-emphasis on realism and perspective accuracy.
   a) Orientation to the characteristics of various pencils and papers, pencil points and basic strokes.
   b) Utilization of lights, shade, shadow, and reflected light in three dimensional drawings.
   c) Methods of strokes for creation of textures in representation of architectural and landscape materials.
   d) Development of full-scale architectural rendering, layout, composition, depths, center of interest, and matting.

2. Color Media: opaque watercolor, transparent watercolor, colored pencil, pastel chalks
   a) Introduction to tools and materials.
   b) Study of color system: hue, value, chromatic, monochromatic, triadic, analogous, and complementary compositions.
   c) Development of a realistic three-dimensional rendering of an architectural environment by use of light, shade, shadow, and reflected light.
   d) Methods of strokes for creation of color textures in representation of architectural and landscape materials.
   e) Development of full-scale architectural color rendering: layout, composition, depths, center of interest, and matting.
   f) Application of basic format of rendering: treatment of foreground, middle ground, and background.

3. Projects:
   a) Color hue and value (transparent watercolor, mixing of hues, values etc.)
   b) Color schemes (opaque watercolor analogous, monochromatic, complementary)
   c) Interior perspective and eyeball form of perspective(colored pencils)
   d) Measuring plane perspective and refining technique(pastel chalks)
   e) Architectural sketches (transparent w.c.)
   f) Architectural details (transparent w.c.)
   g) Architectural rendering (media optional)
Lab Content:

1. Black and White Renderings.  50.00 %
2. Color Renderings.  50.00 %

Critical Thinking: Illustrate building forms and materials individually and in an urban context, using various rendering techniques and integrating the concepts of balance, texture, and color composition with the qualities of professionalism and workmanship.

College Level Required Reading, Writing, and other Outside-of-Class Assignments:
Over a 16 week presentation of the course, three hours per week are required for each unit of credit. Two hours of independent work done out of class are required for each hour of lecture. Outside of the regular class time the students in this class will be doing the following outside of class:

- **Study**: 1.00 additional hour
- **Problem solving activity or exercise**: 1.00 additional hour
- **Required reading**: 1.00 additional hour
- **Written work**: 1.00 additional hour

Textbook:


Other Supplies:

1. Illustration Boards - (or Strathmore drawing paper), always 18” x 24”, single weight or double weight. Color will be as appropriate for each project.
2. Sketch/Notebook - Spiral bound, 100 pages, heavy medium finish plain paper, 8” x 10.”
3. Class Sketch Paper - Provided in class.
4. Sketching Pencils - Assorted, of various lead weights: HB, B, 2B; Eagle "Draughting" #314, Round leads, standard wood or mechanical pencils, etc.
5. Mechanical pencils - .7mm and/or .9mm, HB or B lead.
6. Erasers - Kneaded or white plastic.
7. Pens - Pilot Razor Point .2 -.6 MM.
8. Mat Knife or X-Acto knife.
9. Clearprint vellum - 8 ½”x 11”, about 50 sheets.
10. Water Colors - Dry type in tin.
12. Markers - tbd various sizes .2-.4-.6-.8-1.2 MM.
13. Water Color Brushes - One square brush (1/2” or 3/4” wide), and one round brush (#8 or #12).
14. Mixing Pan - white plastic plate.
15. Water Jug - 1 gallon plastic milk bottle.
17. Friskette - as desired.
18. Paper Tape or Drafting dots.
19. Triangle(s) - 8” or 10” Adjustable plastic.