

Arc 172--Architectural Design II

Triton College
River Grove, Illinois

Instructor: Frank Heitzman, AIA, ASID

Fall, 2010

Course Schedule

Tuesday and Thursday 6:00 p.m. to 10:00 p.m.

This course is a studio course in architectural design using aesthetic principles of movement, balance, rhythm, repetition, proportion, scale, and sequence to produce architectural designs of buildings and elements of buildings by means of drawings and models. This course is taught in a combined "Vertical Studio" collaborative environment with and alongside students from ARC171 in order to be able to learn from other students' efforts share ideas, and learn how to work as a team.

Book Required: None

Topics covered in this course:

Complete various architectural design projects using the basic elements of design including scale, movement, balance, rhythm, repetition, proportion, sequence and style; apply sustainability concepts to projects and quantify LEED credits

Communicate ideas by using architectural models and the following types of drawings: plan, elevation, section, axonometric, 1 and 2 point perspective, shades and shadows, physical models, digital rendering tools

Present ideas and concepts in pencil, ink, colored pencil, computer graphics programs and in foam core and chipboard models.

Design tools: point, line, shape, form, volume, space, sequence, color, texture, light
Composition Tools:

- Movement (Static and Dynamic)
- Balance (Symmetric - axial, biaxial, radial - and Asymmetric)
- Repetition
- Rhythm
- Harmony
- Proportion
- Scale
- Image, Expressive of its function, Reminiscent (of something)
- Imitation of a historical style
- Expressive of its structure
- Complementary to context
- Contrast to context
- Grid and module

Focal Point

Techniques of Design:

"Concept" (also called "parti" or "idea") the essence of the design, the simply expressed main idea.

- Combining elements
- Grouping
- Touching
- Overlapping
- Intersecting
- Interweaving
- Rearranging Elements
- Slipping
- Matching
- Lining up
- Rotating
- Pushing and Pulling
- Pin Wheeling
- Telescoping
- Superimposing a geometry
- Working from simple to complex
- Working from complex to simple
- Additive Form (adding on)
- Subtractive Form (scooping out)
- Modular Organization
- Using a predetermined building plan "type"
- Double-loaded corridor
- Single-loaded corridor
- Central hall
- "H"-plan
- "C"-plan
- Atrium
- Courtyard
- Using a predetermined structural system
- Design from the "Outside-In" (select a predetermined form and fill it up)
- Design from the "Inside-Out" (exterior form of the building results from the spaces needed on the inside, or from the functional program)
- Optimize solar exposure
- Design from energy conservation standpoint
- Passive solar energy
- Active solar energy
- Combination of passive and active solar energy
- "Super insulated"
- Earth Contact
- Natural lighting
- Building envelope optimization (the least area of enclosure to surround the maximum volume of building)
- Select a main theme or focal point and develop building or interior around the focal point (like a steeple in a church)
- Design around the topography of the site
- Design around vehicular traffic and parking (such as an airport)
- Separation of public and private spaces
- Organize the building around pleasant or spectacular views
- Imitate a historic style of architecture or interior design
- Reproduce an "image" of an object which is familiar

Course Schedule:

Week	Project
1 8/24 8/26	Introduction to Architectural Design Lecture Analysis Project (2 weeks)
2 8/31 9/2	Analysis Project
3 9/7 9/9	Analysis Project Presentation of Analysis to class on September 7 at 6:00 p.m., begin SketchUp sketch problem: A Belvedere (1 week)
4 9/14 9/16	SketchUp sketch problem: A Belvedere Presentation to class on September 16 at 6:00 p.m.
5 9/21 9/23	Library for River Grove (7 weeks) LEED checklist research
6 9/28 9/30	Library for River Grove
7 10/5 10/7	Library for River Grove
8 10/14	Library for River Grove No class 10/12
9 10/19 10/21	Library for River Grove
10 10/26 10/28	Library for River Grove
11 11/2 11/4	Library for River Grove Presentation 6:00 p.m. on November 4
12 11/9 11/11	Prefabulous Low Cost Housing for Chicago (6 weeks)
13 11/16 11/18	Prefabulous Low Cost Housing for Chicago
14 11/23	Prefabulous Low Cost Housing for Chicago No class on Thanksgiving
15 11/30 12/2	Prefabulous Low Cost Housing for Chicago

Week	Project
16 12/7 12/9	Prefabulous Low Cost Housing for Chicago
17 12/14 12/16	Prefabulous Low Cost Housing for Chicago Presentation 12/14 at 6:00 p.m. Final Exam December 16 6:00 p.m. to 7:50 p.m.

Materials and supplies needed for this course:

Binder for portfolio

Sketchbook

X-Acto knife (#1)

X-Acto blades (#11) (provided)

Cutting board (provided)

Foam Core (provided)

1 roll, 18" wide yellow tracing paper (provided)

Berol Prismacolors (provided)

6B "woodless" pencil (provided)

#2 pencils (provided)

Pentel sign pen – black (provided)

Pilot "razor point" pen – black (provided)

Hand-held pencil sharpener for woodless and #2 pencils (while out sketching)

Scissors

Grading policy:

Class Activities: 20%

Projects: 40%

Projects receive four grades:

Quality of Design

Presentation

Quality of Workmanship

Completeness

Sketching grades: 20%

Reading & Writing grades: 20%

Meaning of grades:

A: shows total understanding of information taught; submitted work exhibits a professional quality; all instructions and complied with and work is completed on time and is fully finished; quality assurance recommendations are completely followed.

B: shows understanding of much but not all of the information taught; quality of work is good but less than professional; all work is completed on time, and all work submitted is finished; most but not all quality assurance recommendations are adequately followed.

C: shows understanding of only the most important information taught; quality of work is less

than expected for a college student; some work is not completed on time and/or some parts may not be fully finished; some quality assurance recommendations are followed.

D: shows some lack of understanding of information taught; quality of work is poor and unprofessional; work is not completed on time or work is unfinished; many quality assurance recommendations are not followed.

F: shows much lack of understanding of information taught; submitted work does not exhibit the skills taught; much work is incomplete; quality is very poor; most quality assurance recommendations are not followed.

Course Policies of The School Of Architecture

The responsibility of the School of Architecture at Triton College is to teach you practical drawing and design skills, and a broad understanding of building science and theory. Our faculty is committed to excellence in education. We believe the following requirements are an important part of your learning process. We will provide a structured environment so that the greatest number of students can benefit from these educational opportunities. To maximize our efforts to provide you with the best educational experience, we expect you to develop professional attitudes regarding your studies. It has been shown through the years that when students follow these guidelines, they become successful and valuable contributors to the profession.

1. You are required to attend all classes. Listening, observing, and interacting with other students and faculty is a vital part of your education. Students who miss a class will receive an absence for that day. Your attendance will impact your grade. If your absences are excessive, you will be withdrawn from the course. Excessive absences are considered to be three for classes that meet once a week, and five for classes that meet twice a week.
2. If you are absent from class, it is your responsibility to find out from a fellow student what was presented, and what is due for the next class. You are expected to be prepared for the next class. You must complete all missed assignments so that you will not fall behind.
3. You are required to be in class at the beginning time and stay until the scheduled end of the class period. Being late to class or leaving early will result in 1/3 of an absence. If you are tardy, it is your responsibility to tell the Instructor that you have arrived in class; otherwise, you will be marked absent for the day.
4. There are no "Incomplete" grades given in these professional programs.
5. Late projects can only be turned in at the beginning of the following class. The highest possible grade on the late project will be a "C." If the assignment is more than one class period late, it will receive an "F."
6. There is no excused late work due to your absence from class.
7. The final project cannot be turned in late. If it is, you will be withdrawn from the course.

8. All assignments must be completed by the last day of class. If they are not, you will be withdrawn from the course.
9. If you miss the final exam, you will fail the course.