



COURSE OUTLINE

ARC102
Course Number

GRAPHIC COMMUNICATIONS FOR ARCHITECTURE
Course Title

3
Credits

1
Class or Lecture

4
Lab. Work Hours

15 wk
Course Length

Catalog Description:

A lecture/studio course directed at developing the architecture students' Graphic communication skills. Emphasis will be on analytic and descriptive drawings of buildings, everyday objects, trees, plantings, and people. Media used are pencil, pen and ink and an introduction to Photo/ image and Computer aided design software.

Prerequisites:

Co-requisites:

ARC121

Required Materials:

Architectural Graphics; Francis D.K. Ching: 6th ED. 2009; ISBN: 978-1-119-03566-4 April 2015

Last Revised: Fall 2017

Course Coordinator: Garry Perryman, e-mail: perrymag@mccc.edu, phone: 609.570.3357

Available Resources:

Additional books in ET213 Architecture studio available for student reference.

Course Goals:

As designers, freehand drawing is a valuable tool. The class begins with certain premises about the relationship of experience, drawing, memory and design.

- A. Understanding one's experience of the world is enhanced by the process of drawing.
- B. The ability to remember that understanding is enhanced by having made such drawings.
- C. The ability to draw accurate images is directly related by one's efforts to do so.
- D. Together, these remembered experiences and understandings constitute the memory that one calls upon in order to design.

Drawing is a tool for learning, but it is also a tool for communicating. Communicating ideas is an integral part of a designer's job. Lectures, exercises, and projects to develop drawing skills and an understanding of the drawing systems and techniques designers use to study and represent the visual environment.

II. Course-Specific General Education Knowledge Goals and Core Skills.

General Education Knowledge Goals Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals. **Goal 9. Ethical Reasoning and Action.** Students will understand ethical issues and situations. **MCCC Core Skills Goal B. Critical Thinking and Problem-solving.** Students will use critical thinking and problem solving skills in analyzing information. **Goal C. Ethical Decision-Making.** Students will recognize, analyze and assess ethical issues and situations. **Goal E. Computer Literacy.** Students will use computers to access, analyze or present information, solve problems, and communicate with others. **Goal F. Collaboration and Cooperation.** Students will develop the interpersonal skills required for effective performance in group situations.

Course-specific General Education goals and objectives

Unit I Freehand Sketching Course goal A; Skills Goal B

The student will be able to...

- Understand how the hand sketch can be used to express space, form, and composition use construction lines and basic geometries to establish proportion
- Understand how light works to define space with value and tone in a sketch
- Understand how the abstraction of information from an image heightens the reading of space and concepts.
- Sketch multi-view drawings.
- Demonstrate isometric sketching techniques, including non-isometric lines and isometric circles.

Unit II: Observation and Representation (organic shape, contour, cross contour)

The student will be able to: Goal B,

- Observe and draw natural and organic objects such as hands, leaves, and trees using several methods of line drawing.
- Draw using blind contour to increase perception of contour and detail.
- Understand how a drawing is constructed in stages including refinement, correction, and gradual increase in accuracy and detail.
- Understand the difference between outline, shape and/or cross contour.
- Observe and draw negative shapes as an aid in drawing positive shapes.
- Use a view frame as an aid to composing and seeing proportional relationships.

Unit III Diagrams Goal C

The student will be able to...

- create clear, useful diagrams by sketching and on the computer
- translate conceptual ideas into a design proposal
- understand how diagrams relate to the design process
- understand how lighting and contrast effect the legibility of images

Unit IV Orthographic Drawing

The student will be able to...

- understand scaled orthographic drawing conventions
- learn and use graphic conventions for plans, sections, and elevations
- use line weights, lines above and below the slice, hidden lines, and scale
- Explain the nature of an orthographic projection.
- Demonstrate methods for transferring the size of features from one multiview projection to another.
- Identify the primary views used in architectural multiview drawings.

Unit V Axonometric Drawing

The student will be able to...

- understand scaled Axonometric drawing conventions
- learn and use line weights and line types for Axonometric drawings
- use projection lines and line weights

Unit V Drawing One- & Two-Point Perspective

The student will be able to...

- Identify the horizon line and vanishing point/s in photographs and in exterior and interior views.
- Apply the one-point perspective system accurately and consistently to produce drawings that represent interior spaces accurately from observation.
- Apply the two-point perspective system accurately and consistently to produce drawings that represent exterior views of buildings and interior spaces accurately from observation.
- Utilize a specific one-point perspective drawing system to construct accurate perspective drawings of images from your imagination.
- Utilize a specific two-point perspective drawing system to construct accurate perspective drawings of images from your imagination.
- Include people, landscaping and vehicles accurately in perspective drawings.
- Discuss their own work and that of others using the terms and vocabulary introduced in this unit.

Unit VI Spatial Analysis and Digital modeling

The student will be able to...

- model in Computer aided design software and understand the key tools that are useful to the design process
- Learn the process of converting a rough 3d model into a legible line drawing and to understand the relationship between line drawing and digital modeling.
- Understand the relationship of perspective to digital model space.
- Model in Computer aided design software to understand the key tools that are useful to the design process.

Unit VII Drawings and Presentation Sheet

The student will be able to...

- create a complete large scale drawing layout
- continue to explore line weights and legibility
- learn how to integrate drawings, renderings, and text in a presentation format
- Discuss their own work and that of others using the terms and vocabulary introduced in this unit.

Unit VIII Drawing and photo manipulation Goal 4, Goal E

The student will be able to...

- Learn the major tools and commands of Digital Photo software and how to use them effectively **Goal 4,**
- Understand the practical and creative applications of Digital Photo software for graphic design, for architecture presentation. **Goal 4**
- Understand concepts of digital imaging such as resolution and digital color and be able to manipulate them effectively. **Goal 4**
- Learn the skills of photo retouching, manipulation, and composition
- Be able to use Digital Photo software in conjunction with other programs and various file types
- Know the various types of output and how to prepare computer files to obtain appropriate output.

INSTRUCTIONAL MODES:

A lecture, and studio course, with demonstrations by the instructor.

Assignments with specific goals and objectives with discussions and critiques of student work. The student is responsible for regular attendance, participation in classroom discussions and critiques of other student work.

Evaluation of grades are determined based upon the following:

Attendance, participation, and estimate of quality of class work and homework assignments (by instructor).

Values of quality, aesthetics, etc., are based upon the instructor's judgment of the work produced, and the total result. To receive full credit, all assignments are due on time. A late assignment will be accepted one class period after due date with a reduced letter grade. After one missed class period, late assignments will receive the grade of "F."

Class: There will be one lecture hour per week. The remainder of the time will be spent doing drawing exercises. There will be graded outside assignments. There will be semi-weekly critiques in which we will review class work and outside assignments.

Mid-term and Final Portfolios: Usually consists of 8 to 10 drawings done in class. Make sure you save your drawings!

Drawing Journal/ sketchbook: Students will be expected to keep a drawing journal/ sketchbook. The mid-term journal/ sketchbook will consist of not less than 30 pages. The final journal will consist of not less than 60 pages. No in-class drawings will be permitted in journals.

Final Assignment: This drawing project is assigned to showcase the drawing skills presented. These drawings are done in class and will be reviewed in a special critique where students will receive feedback from classmates and the instructor and invited guests.

Slide Lectures: Great drawings, mostly western in origin, will be viewed and discussed.

Approximately 5 such lectures will be conducted throughout the semester. Student participation is expected.

Students will be evaluated according to the following criteria:

A. Comprehension of ideas and concepts presented in class as shown in student's drawings.

- B. Consistent evidence of improvement in practical aspects of drawing: hand eye coordination, line quality, value sensitivity, and control of media.
- C. Creative application of ideas, concepts and media.
- D. Professional attitude towards learning as evidenced by: class attendance, participation in class discussions, critiques and projects.

SPECIFIC EVALUATION CRITERIA:

Please read the MCCC catalog for an explanation of Academic Policies and Regulations.

The grade of “A (+/-)” will be earned by a student demonstrating mastery of the essential elements of drawing, as well as excellence and originality in the completion of all in-class course work and out-of-class assigned homework. All of this must be in addition to under 2 absences.

The grade of “B (+/-)” will be earned by a student demonstrating a strong understanding of the essential elements of drawing; as well as above average achievement in the completion of almost all of the in-class course work and out-of-class assigned homework. All of this must be in addition to between 2-3 absences.

The grade of “C (+/-)” will be earned by a student demonstrating an average understanding of the essential elements of drawing, as well as average achievement in the completion in a majority of the in-class course work and out-of-class assigned homework. All of this must be in addition to between 3-4 absences.

The grade of “D (+/-)” will be earned by a student demonstrating little understanding of the essential elements of drawing, as well as below average achievement in the completion of most of the in-class course work and out-of-class assigned homework. All of this must be in addition to between 4-5 absences.

The grade of “F” will be earned by a student demonstrating a weak understanding of the essential elements of drawing, as well as not completing a majority of either the in-class course work and/or the out-of-class assigned homework. You will also fail if you get more than 5 absences.

METHODS FOR EVALUATION

Attendance in every class is required. Students must arrive on time and remain for the entire period. Two excused absences are allowed. Late arrivals or leaving early will count as one half absences to one whole absence at the instructor’s discretion. Beginning with the third, the final grade will be lowered for each absence. Students will be expected to make up missed work.

No late assignments, drawing journals, or portfolios will be accepted.

Class participation will be noted.

Course work will be weighted as follows:

Assignments and class participation 15%

Drawing Journal 25%

Mid-term and Final Assignment 30%

Mid-term and Final Portfolio 30%

OTHER CLASS PROCEDURES

Students should be prepared with a full set of drawing materials for each class. Students appearing in class without the proper materials (including sufficient paper) will be counted absent. Students should plan on spending a minimum of 2 hours per week on drawing journal.

Behavior that disrupts class is not tolerated. Headphones are permitted.

All work must be submitted in flat portfolios, hinged on one edge that opens like a folder (not like an envelope). These portfolios must be slightly larger than drawings and tie or Velcro closed. No drawing tubes will be accepted.

V. Academic Integrity Statement:

Students are expected to comply with the college-wide requirements for academic integrity. Mercer County Community College is committed to Academic Integrity—the honest, fair, and continuing pursuit of knowledge, free from fraud or deception. This implies that students are expected to be responsible for their own work. Presenting another individual's work as one's own and receiving excessive help from another individual will qualify as a violation of Academic Integrity. The entire policy on Academic Integrity is located in the Student handbook and is found on the college website (http://www.mccc.edu/admissions_policies_integrity.shtml).

VI. Special Needs Students Statement

Mercer County Community College is committed to ensuring the full participation of all students in all activities, programs and services. If you have a documented differing ability or think that you may have a differing ability that is protected under the ADA and Section 504 of the Rehabilitation Act, please contact Arlene Stinson in LB 216 stinsona@mccc.edu for information regarding support services. If you do not have a documented differing ability, remember that other resources are available to all students on campus including academic support through our Academic Learning Center located in LB 214.