Introduction to Computer Aided Drafting (2 credits)--ARCH 210

Course Description
Gives overview of use of computers as applied to architectural drawing. Covers software capability of the system by generating, moving, editing, or deleting the basic elements. Use CRT keyboard, table/menu, and other items that make up the system. Lecture 1 hour, Laboratory 3 hours. Total 4 hours per week.

Objectives of Course
Draw a set of residential house plans or plans of an assigned nature. Have a working knowledge of each of the following areas as it relates to the fundamentals of architectural drafting including:
1. Plat and top, drainage
2. Plat and location, mapping
3. Preliminary floor plan
4. Wall section
5. Foundation
6. Front elevation
7. Side elevation

Be competent with basic CAD operations in order to: Draw fundamental shapes, mix text and graphics, use the dimensioning commands, make and use symbols, modify drawings, and use the plotter(s) and printer(s) to get graphics copies.

Instructional Materials

Instructors and E-mail Address:
Jamie Rector jrector@vhcc.edu
Gary Thomas gthomas@vhcc.edu

Attendance Policy
Students are expected to attend each class meeting.
Tardiness will be noted and your grades will reflect any excessive absences.

Grading Procedure
50% Drawing 50% Quizzes and Tests

Service Learning
Service learning combines service to the community with classroom learning. The service learning project for ARCH 210 will focus on the following course goals:
To provide the student with a clear understanding of the concept of drawing a complete set of designed plans to construct a house, commercial building or additions to existing structures.

To apply this understanding to the actual construction of an addition to an existing structure.

To accomplish these goals, the student will go the Faith in Action building located in Abingdon, VA. At this existing structure site, the student will take measurements needed to design an addition to the Faith in Action building. This assignment will require more than one visit to the job site. Also, several hours of drawing on the computer is required to design the plans for the addition to the existing structure at Faith in Action.

Each service learning student must keep a portfolio of the drawings he or she will be designing to document and demonstrate their learning and work accomplished during the semester. Student portfolios contain evidence of both products and processes completed and ask students to assess their work in terms of the learning objectives of the course. The portfolio will contain pictures of the job site, any contracts between the student and client, sketches of the job site, and the final drawings of the plans for the addition. Students will write an evaluation providing a self-assessment of how effectively they met the learning objectives of the course.

Timetable for completing the project: During the second week of class the student will go to the job site and meet with the owner/manager and discuss the project with this person. He or she will then proceed to take measurements and discuss the design with this manager or owner. The student will then go back to the college and begins the design of the plans for the addition.

During the fourth and fifth weeks of school, the student will complete the design of the plans for the addition. It will take the student approximately 10 hours of work to complete the project. This time will be recorded in a log and will be verified by the instructor in charge.

The student will also share their service learning experience with peers by demonstrating their drawings in a class presentation through a video, presentation, or discussion. This affords the student an opportunity to display their work in a public format. A similar presentation can be given to the agency as a final recognition of the student's involvement in this project.

The student will be required to do an evaluation that may be required to additional paperwork.

THIS SERVICE LEARNING PROJECT IS AN OPTIONAL COMPONENT OF ARCH 210. IF YOU CHOOSE TO DO THE SERVICE LEARNING PROJECT, IT WILL COUNT AS TEN PERCENT OF YOUR GRADE.

Office hours and telephone number
Office hours are posted on my office door. If you need to meet with me or contact me, please contact me at 276.739.2418. You can leave a message. If for any reason you must miss class, please call and leave a message.