NEW RIVER COMMUNITY COLLEGE
DUBLIN, VIRGINIA

COURSE PLAN

Course Number and Title: CAD 155 - Introduction to Architectural Drafting

Prepared by: Jeff Levy
(Instructor) Fall, 2014

Approved by: ________________________________
(Dean) Fall, 2014

I. Course Description

Introduces fundamentals of architectural drafting and planning of functional buildings. Presents architectural lettering, symbols, and dimensioning, and working drawings including site plans, floor plans, elevations, sections, and details.
Prerequisite: CAD 114, CAD 201 or instructor’s permission. Lecture 2 hours, lab 3 hours, total 5 hours per week. (3 credits)

II. Introduction

The instructor will teach some aspects of Hand Drafting and AutoCAD/Architectural Desktop to develop the basic principals for students in drafting and design in the Architectural World. Students will learn components of both Hand Drafting and ADT that will allow them to become more proficient in drawing different elements of Architectural working drawings.

Purpose:
1. To prepare men and women to work as drafting and technicians in construction, architecture and civil engineering related industries as well as to open their eyes to the possibilities furthering their education in Architecture. To provide the students with learning experiences that will enable them to advance on the job and keep pace with industry.
2. To develop students' abilities in human relations, communications, and other aspects of general education.
III. Student Learning Outcomes

Upon successful completion of this course, the student will be able to perform graphic tasks that encompass the following skill sets.

Students will have working knowledge of:

- Orders of Architecture
- Hand Sketching
- Architectural Lettering
- Architectural Dimensioning
- Architectural Drafting Techniques
- Floor Plans (schematic, single line and full)
- Foundation Plans and Details
- Wall Sections 2D and 3D
- Creating Design Scopes
- Roof Styles
- Elevations
- Windows
- Doors
- Schedules
- Civil Eng. – Plot Plans, Topography, Site Work
- IBC Bldg. Code

Also, after completion of this course the student will be able to:

- Recognize the features of major traditional and contemporary architectural styles
- Demonstrate the proper techniques for hand sketching and lettering
- Identify the architectural symbols used in a set of working drawings
- Show proficiency in the use of a CAD system to create architectural drawings
- Identify the types of elevations and sections used in architectural drawings
- Use proper architectural dimensioning and labeling techniques
- Create a limited set of working drawings for a residential building
- Identify general roof types and characteristics
- Differentiate between various types of windows used in buildings
- Describe the principal types of doors used in buildings
- Understand architectural schedules
SOFTWARE SKILL SETS
- Project setup and management
- Paper Space / Model Space
- Architectural Scaling
- 3D wall creation
- Drawing Annotation
- Dimensioning Standards
- Proper use of Callouts
- Creating links between and using Door and Window Schedules
- Using the Content Center
- Using Properties pallet
- Using the Design Center
- How to customize wall types, windows, doors etc…
- Creating 3D models, live wall and full house sections
- How to detail a drawing
- Proper placement of notes
- Rendering and Lighting
- Proper placement of notes
- How to apply materials to objects

There will be a comprehensive architectural project completed by the student during the 10th – 14th Week of the semester.

IV. Instructional Methods

- Lecture
- Chapter Outlines(by Students)
- In Class Exercises
- Video Tutorials
- Online Video/Youtube Tutorials/Instruction
- Project Based Instruction

SOFTWARE COVERED
- AutoCAD
- AutoCAD Architecture
- REVIT

V. Instructional Materials:

BOOKS
DRAFTING KIT( from last year or purchase in bookstore)
PORTABLE HARD DRIVE – 300GB minimum
VI. Course Content

In Depth Study of the following:

- Floor Plan Design/Drafting
- Foundation Plans
- Framing Plans
- Details
- Longitudinal Sections
- Transverse Sections
- Simple Wall Sections
- Electrical Plans
- Reflected Clg. Plans
- Site Plans
- Proper Lettering for notes/callouts/labels and leaders

VII. Evaluation

The numerical range for grades will be:

- A = 91 - 100  Drawings/Assignments ........................................ 50%
- B = 81 - 90  Tests/Quizzes ......................................................... 40%
- C = 71 - 80  Attendance/Class part. ........................................... 10%(Final Grade)
- D = 61 - 70
- F = 60 or below

VIII. Attendance

Regular attendance at classes is required. When absence from a class becomes necessary, it is the responsibility of the student to inform the instructor prior to the absence whenever possible. The student is responsible for the subsequent completion of all study missed during an absence. Any instruction missed and not subsequently completed will necessarily affect the grade of the student regardless of the reason for the absence.

IX. Cheating Policy

Students in the CAD/Architecture & Game Technology program will be held to the highest and strictest level of ethical educational conduct. Suspicion of Cheating &/or Plagiarism will result in an Incomplete “I” grade for that project, test or homework assignment. Upon review if it is determined that the student was in violation of the schools cheating policy, he or she will receive the Grade of “F” which will be calculated as a ZERO “0” averaged in with other grades for the project automatically, may receive an “F” for the course and will have to repeat the course in order to graduate. If the severity of the offense is enough as to warrant it, the student may be kicked out of the CAD program all together.
Cheating / Plagiarism may be defined as but not limited to the following for this curriculum.

- Turning in anything you did not do 100% yourself if it is an “individual” non-team project.
- Copying ANY part of someone else’s work
- Making the effort to copy or steal someone else’s work
- Taking someone else’s CAD electronic file and manipulating it to give the appearance that it is your own work.

X. Withdrawal Policy

Student Initiated Withdrawal Policy

A student may drop or withdraw from a class without academic penalty during the first 60 percent of a session. For purposes of enrollment reporting, the following procedures apply:

a. If a student withdraws from a class prior to the termination of the add/drop period for the session, the student will be removed from the class roll and no grade will be awarded.

b. After the add/drop period, but prior to completion of 60 percent of a session, a student who withdraws from a class will be assigned a grade of “W.” A grade of “W” implies that the student was making satisfactory progress in the class at the time of withdrawal, that the withdrawal was officially made before the deadline published in the college calendar, or that the student was administratively transferred to a different program.

c. After that time, if a student withdraws from a class, a grade of “F” or “U” will be assigned. Exceptions to this policy may be made under documented mitigating circumstances if the student was passing the course at the last date of attendance.

A retroactive grade of “W” may be awarded only if the student would have been eligible under the previously stated policy to receive a “W” on the last date of class attendance. The last date of attendance for a distance education course will be the last date that work was submitted.

Late withdrawal appeals will be reviewed and a decision made by the Director of Student Services.

No-Show Policy

A student must either attend face-to-face courses or demonstrate participation in distance learning courses by the last date to drop for a refund. A student who does not meet this deadline will be reported to the Admissions and Records Office and will be withdrawn as a no-show student. No refund will be applicable, and the student will not be allowed to attend/participate in the class or submit assignments. Failure to attend or participate in a course will adversely impact a student’s financial aid award.
**Instructor Initiated Withdrawal**

A student who adds a class or registers after the first day of class is counted absent from all class meetings missed. Each instructor is responsible for keeping a record of student attendance (face-to-face classes) or performance/participation (DE classes) in each class throughout the semester.

When a student’s absences equal twice the number of weekly meetings of a class (equivalent amount of time for summer session), the student may be dropped for unsatisfactory attendance in the class by the instructor.

Since attendance is not a valid measurement for Distance Education (DE) courses, a student may be withdrawn due to non-performance. A student should refer to his/her DE course plan for the instructor’s policy.

In accordance with the No-Show Policy, a student who has not attended class or requested/accessed distance learning materials by the last day to drop the class and receive a refund must be withdrawn by the instructor during the following week. No refund will be applicable.

When an instructor withdraws a student for unsatisfactory attendance (face-to-face class) or non-performance (DE class), the last date of attendance/participation will be documented. Withdrawal must be completed within five days of a student’s meeting the withdrawal criteria. A grade of “W” will be recorded during the first sixty percent (60%) period of a course. A student withdrawn after the sixty percent (60%) period will receive a grade of “F” or “U” except under documented mitigating circumstances when a letter of appeal has been submitted by the student. A copy of this documentation must be placed in the student’s academic file.

The student will be notified of the withdrawal by the Admissions and Records Office. An appeal of reinstatement into the class may be approved only by the instructor.

**XI. Disability and Diversity Statements**

If you are a student with a documented disability who will require accommodation in this course, please register with the Disability Services Office located in the Counseling Center for assistance in developing a plan to address your academic needs.

The NRCC community values the pluralistic nature of our society. We recognize diversity including, but not limited to, race ethnicity, religion, culture, social class, age, gender, sexual orientation and physical or mental capability. We respect the variety of ideas, experiences and practices that such diversity entails. It is our commitment to ensure equal opportunity and to sustain a climate of civility for all who work or study at NRCC or who otherwise participate in the life of the college.