

HOUSTON COMMUNITY COLLEGE – Northeast College

Syllabus

Adv. CAD Architectural Drafting Revit-II

DFTG 2331

Drafting & Design Technology Mr. Marvin Griffin – Department Chair Phone: 713 718-5255
 Course Reference Number: 18871 Fall-2009
 Instructor: Nelson Simpson Phone: (832) 431-8023
 Office Hours: 6:00 p m to 9:00 p m Room: 156 Day(s): MW
 Semester Credit Hours: (SCH) 3 Format: Lecture: 2 hrs. Lab: 4 hrs.
 Continuing Education Units: (CEU) 9.6

PREREQUISITE: DFTG 2319 Intermediate AutoCAD or Department Approval.

COURSE DESCRIPTION: Use of architectural specific software to execute the elements required in designing standard architectural exhibits utilizing custom features to create walls, windows and specific design requirements for construction in residential/commercial and industrial architecture.

TEXT: Autodesk Revit Building 9 for Architects and Designers ISBN: 1-932709-20-7 Sham Tickoo

MATERIALS REQUIRED FOR COURSE: All students will be required to purchase the following materials to be used for course: 1 to 2GB USB. Writing materials (notebook & pen)

COURSE OBJECTIVES: Use architectural techniques to design, assemble, evaluate, and render architectural building components; develop plan and elevation drawings and details from three-dimensional architectural models

KNOWLEDGE:

1. demonstrate familiarity with the software and the required drawing setup for making efficient use of it.
2. know how to create three-dimensional models, using the available software capabilities
3. know how to access automation facilities available to the software user.

2.SKILLS:

1. set up file templates for producing a set of construction documents.
2. properly manage files within a WINDOWS environment
3. create palettes of common used blocks and elements for repetitive use.

3. ATTITUDES/BEHAVIORS:

1. follow step-by-step instructions via verbal and written instructions.
2. study independently using the course text and the on-line assistance facilities.
3. demonstrate patience.

SCANS SKILLS: The Department of Labor has identified skill sets that U.S. employers want most in entry level employees. It is our commitment to prepare every student with the knowledge and skills needed to succeed in today's dynamic environment. Toward this end the following skills will be included in this course:

- Exercises leadership: To be able to motivate others through the communication of ideas to justify a position.
- Uses computer to process information: use a computer graphics program, i.e., AutoCAD, to prepare presentation graphics.
- Maintain/troubleshoot technologies:
- Students will be presented with a problem in which they will be required to use specific team-building concepts to develop a work-group. All work in this course will be prepared on a computer and it will be necessary for the student. Software customization will require student to maintain and troubleshoot changes made to insure proper function of the software.

Evaluation of these skills will be based on the success of each student's presentation and the demonstration of system customization.

GENERAL COURSE EVALUATION PROCEDURE: The student will be evaluated and receive a final grade based upon the following criteria:

- Laboratory work consisting of assigned technical drawing problems.
- A minimum of six (6) tests: (4 quizzes, a mid-term and a final examination)
 - Individual instructors may schedule more test if desired
- Class and laboratory attendance, active participation in class, professional attitude and growth in terms of technical skills development and teamwork within the laboratory environment shall be taken into consideration.

COURSE EVALUATION PROCEDURE: The student will be evaluated and receive a final grade based upon the following criteria:

Lab. work consisting of assigned technical/engineering drawings problems.

2 Quizzes (minimum) – 20% Drawings – 35% Mid-term Exam – 20% Final Exam – 25%*

Your attendance (class and lab), active participation in class, professional attitude and growth in terms of technical/ techno-logical skill development and your team work within the lab environment will be taken into consideration in your final grade.

GRADING PROCEDURE:**A = 90 – 100****B = 80 – 89****C = 70 – 79****D = 60 – 69****F = below 59**

The drawing portion of the above evaluation criteria shall be based to the following portions of the drawing development.

Layout 35 %; Dimensional accuracy 35 %; Neatness 20 %; Timely completion 10

LATE ASSIGNMENT POLICY: Students are encouraged to turn assignments in on time. This allows the instructor time to grade the work and return it to the student with feedback to be used as a learning tool. Late assignments will not be severely penalized, but no assignment will be accepted after the last class before the Final exam.

MAKE-UP TEST/PROJECT POLICY: The student must request a make-up test and it should be scheduled at the earliest possible date following the quiz (or mid-term) missed. NO make-up test are given for the final examination or after the final exam .

EXTRA CREDIT: Extra credit work is offered only to assist students that have a grade range of “D” or “F” at the mid-term break. This work cannot be substituted for regular assignments and can only raise the final grade to a maximum of a “C”.

PROGRAM ACCESSIBILITY (ADA): The Houston Community College, Drafting and Design Technology Program is committed to making all aspects of the program accessible to individuals with disabilities. Students with disabilities, as defined by the American with Disabilities Act (ADA), are required to obtain certification of their impairment through the Northeast College ADA Certification Office, located in the Northline Mall Campus. For information call Barbara Morris at, 713-718-8148.

CLASS ATTENDANCE: You are expected to attend all lecture classes and labs. You are also responsible for materials covered during your absence from either. You must contact the instructor to obtain make-up assignments. Class attendance is checked daily.

It is your responsibility to drop a course, should you choose. The instructor has the authority to drop you from the class for excessive absences, that is, you may be dropped from a course after accumulating absences in excess of 12.5 percent of the total hours of instruction (lecture and lab). For example:

- A 3 credit hour lecture class meeting 3 hours per week – 2 absences (6 hrs.) is 12.5% of the class.
- A 3 credit hour lecture/lab class meeting six hours per week – 2 absences (12 hrs.) is 12.5% of the class.

Administrative drops are at the discretion of the instructor. Failure to withdraw officially will result in you receiving a grade of “F” in the course. **Note:** *Although it is your responsibility to officially withdraw from a course, it is always a good idea to discuss any attendance problems with your instructor first. Class attendance is very important, but your instructor may be able to help you catch up. If you become ill or know you are going to miss class for some reason, tell your instructor as soon as possible.*

Departments and programs governed by accreditation or certification standards may have different attendance policies.

RELIGIOUS HOLIDAYS: If you observe a religious holiday and miss class, you must notify your instructor in writing two weeks in advance to arrange to take a test or make up an assignment. A religious holiday is "a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code."

SCHOLASTIC DISHONESTY: Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. College System Officials may initiate penalties and/or disciplinary proceedings against a student accused of scholastic dishonesty.

"Scholastic dishonesty" includes, but is not limited to, cheating on a test, plagiarism, and collusion.

"Cheating" on a test includes:

- Copying from another student's test paper;
- Using materials during a test that are not authorized by the person giving the test;
- Collaborating with another student during a test without authority;
- Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of an un-administered test;
- Bribing another person to obtain a test that is to be administered.

"Plagiarism" means the appropriation of another's work and the unacknowledged incorporation of that work in work you offer for credit.

"Collusion" means the unauthorized collaboration with another person in preparing work offered for credit.

Reference the following web link for additional information: <http://www.hccs.cc.tx.us/handbook/StudentP.htm>

*The Final Examination for this class will be held on May 00, 2004 from ##:00 am to ##:00 am

Course Schedule
Intro and Intermediate Revit
DFTG 1392 & 2331

WEEK 1

Chapter-1 Getting started with Revit
(Revit-I: Tutorial-1 and Ex-1; Revit-II: Tutorial-2)

WEEK 2

Chapter-2 Creating the First Project
(Revit-I: Tutorial-1, 2 and Ex-1; Revit-II: Tutorial-2,4)

WEEK 3 & 4

Chapter-3 Using Basic Components
(Revit-I: Tutorial-1 and Ex-1; Revit-II: Tutorial-2, and Ex-3)
Chapter-4 Using the Editing Tools
(Revit-I: Tutorial-1 and Ex-1; Revit-II: Tutorial-2 and Ex-2)

WEEK 5 & 6

Chapter-5 Working with Datum and Creating Standard Views
(Revit-I: Tutorial-1 and Ex-1; Revit-II: Tutorial-2)
Chapter-6 Using Basic Building Components -II
(Revit-I: Tutorial-1 and Ex-1; Revit-II: Tutorial-2)

WEEK 7 & 8

Chapter-7 Using Basic Components-III
Chapter-8 Adding Site Features

Mid-Term

WEEK 9 & 10

Chapter-9 Using Massing Tools
Chapter-10 Adding Annotations and Dimensions

WEEK 11 & 12

Chapter-11 Creating Project Details and Schedules
Chapter-12 Creating Drawing Sheets and Plotting

WEEK 13 - 15

Chapter-13 Creating 3D Views
Chapter-14 Rendering Views and Walkthroughs
Chapter-15 Using Advanced Features

WEEK 16

Final Exam