<p align="center">**ARCH 83 Course Outline as of Fall 2011**</p>

CATALOG INFORMATION

Dept and Nbr: ARCH 83   Title: CAD RESIDENTIAL DRAFTING
Full Title: Residential Drafting/Design Using CAD
Last Reviewed: 11/20/2006

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	3.00	17.5	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	2.00		Non-contact DHR	35.00

Total Out of Class Hours: 70.00   Total Student Learning Hours: 192.50

Title 5 Category: AA Degree Applicable
Grading: Grade Only
Repeatability: 39 - Total 2 Times
Also Listed As:
Formerly: CONS 83

Catalog Description:
Two-dimensional architectural drafting utilizing the AutoCAD Software Program. AutoCAD setup, construction, and editing commands will be emphasized as the student constructs a set of working drawings for a residence. Topics covered include: drawing environment setup, layering, dimensioning, annotation, prototype drawings, layout and editing skills, project design development, working drawing format, construction practices and procedures, and plotting.

Prerequisites/Corequisites:
Course Completion of APTECH 57 and Course Completion of ARCH 81 (or CONS 80B)

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Two-dimensional architectural drafting utilizing the AutoCAD Software Program. AutoCAD setup, construction, and editing commands will be emphasized as the student constructs a set of working drawings for a residence. (Grade Only)
Prerequisites/Corequisites: Course Completion of APTECH 57 and Course Completion of

ARCH 81 (or CONS 80B)
Recommended:
Limits on Enrollment:
Transfer Credit:
Repeatability: Total 2 Times

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer: Effective: Inactive:

UC Transfer: Effective: Inactive:

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:
At the conclusion of this course the student will be able to:
1. Demonstrate proficiency in using AutoCAD commands
necessary for construction of architectural working drawings.
2. Identify the essential steps necessary for development of
a set of architectural working drawings.
3. Appropriately set up an architectural environment within
the AutoCAD drawing file for production of architectural
drawings.
4. Systematically research, conceptualize, and design a building.
5. Complete a set of architectural working drawings which include: Floor
Plan, Site Plan, Foundation and Floor Framing, Roof Framing, Structural
Sections, Construction Details, and Elevations.
6. Plot architectural drawings appropriately using a large
format ink-jet printer.
7. Repeating students will:
   a. Apply AutoCAD to new projects and / or
   b. Gain skills using new release of AutoCAD software

Topics and Scope:

I. Essential AutoCAD Skills - Review
   A. Construction/layout
   B. Editing
   C. Dimensioning
   D. Annotation
II. Project overview

   A. Preliminary design and design
  development
     1. Site analysis
     2. Programming and adjacency diagrams
     3. Schematic design
     4. Preliminary design
   B. Working drawings
III. Setting up the AutoCAD Environment
   A. Units/Limits
   B. Tiled model space/paperspace
   C. Layer conventions
   D. Dimensioning style
   E. Prototype drawing
IV. Working Drawings
   A. Floor Plan
   B. Site Plan
   C. Foundation and Floor Framing
   D. Roof Framing
   E. Structural Sections
   F. Construction Details
   G. Elevations
V. Plotting Using a Large-format Ink-jet Printer
VI. Repeating Students
   A. Applying AutoCAD to new projects
   B. New AutoCAD release

Assignment:

1. Research information needed to design the assigned building.
2. Conceptualize and design the assigned building.
3. Complete the following drawings using AutoCAD: site plan, floor plan, framing plans, details, and sections.
4. Exams: Midterm and Final, comprising performance (computer applications) and objective assessment.
5. Students who choose to repeat the course will enhance their skills and proficiencies through the completion of new projects and / or complete projects using new release of AutoCAD software.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Completing drawings.	Problem solving 30 - 50%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Performance exams	Skill Demonstrations 40 - 50%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion	Exams 10 - 20%

Other: Includes any assessment tools that do not logically fit into the above categories.

None	Other Category 0 - 0%

Representative Textbooks and Materials:
Stine, Daniel John. Residential Design using AutoCAD 2007. SDC Publications, 2006.
Instructor prepared materials.