CET 115 Architectural Drafting and Computer Aided Design

Course Description: A course on applying architectural drafting techniques and computer aided design concepts. Topics include: building codes, building materials, and fundamentals of CAD software. Students prepare residential working drawings.

Prerequisites(s): None **Corequisite(s):** None

Lecture Hours: 2	Lab Hours: 4	Credit Hours: 4
Lab Fee: $140	Supplemental Fee: $0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: □ Web	□ Hybrid	☒ Classroom
Semesters Offered: ☒ Fall	☒ Spring	☒ Summer

Course Primary Text:

Title: AutoCAD 2019 Instructor	Edition:
Author(s): James Leach	
Publisher: Delmar-Cengage Learning	

Supplemental Materials:

Architectural Drafting Kit
Downloading CAD Software

Course Outcomes:

1	ABET (A), Introduced: Students are introduced to the application of knowledge, techniques, skills, and modern tools of the discipline. Use of autoCAD software in an efficient way.
2	ABET (F), Introduced: an ability to apply written, oral and graphical communications in both technical and non-technical environments; an ability to identify and use appropriate technical literature.
3	ABET (I), Introduced: a commitment to quality, timeliness and continuous improvement.
4	ACCE 4, Introduced - Demonstrate the ability to use current technology related to the construction process.
5	ACCE 5, Introduced - Interpret construction documents (contracts, specifications, and drawings) used in managing a construction project.
6	ACCE 10, Introduced - Recognize basic construction methods, materials and equipment.

Course Topics:

Week 1	Introduction, drafting equipment, and techniques
Week 2	Lettering techniques

Week 3	Basic geometric and annotation techniques
Week 4	Various scales: Architectural, Metric and engineering
Week 5	Drawing isometrics
Week 6	Designing a building layout
Week 7	Foundation plan
Week 8	Floor plans, wall sections, and general notes
Week 9	Introduction to AutoCAD, graphical user interface, display, projects, extents, and limits
Week 10	Coordinates, UNITS, LINE, ARC, CIRCLE, RECTANG
Week 11	AutoCAD plotting, PLINE, POLYGON, POINT, DONUT
Week 12	NEW, OPEN, SAVE, SAVEAS, REDRAW, REGEN, ZOOM, PAN, VIEW
Week 13	Object selection, selection sets, object snaps, ERASE/OOPS, UNDO/REDO, MOVE/COPY, FILLET, CHAMFER
Week 14	EXTEND, LENGTHEN, TRIM, BREAK, JOIN, ROTATE, ALIGN, SCALE, STRETCH, ARRAY, PEDIT, EXPLODE
Week 15	LAYER, COLOR, LINETYPE, LTSCALE, LINEWEIGHT, PROPETIES. MATCHPROPS, TEXT, STYLE, MTEXT, DDEDIT, SPELL, QTEXT, TEXTFILL

Methods of Evaluation/Assessment

Grading:	Test:	10%
	Labs:	90%
Grade Scale:	A	> 90
	B	80-89
	C	70-79
	F	< 69

Course Keeper: Elias Feghali

Date Completed: 9/18/13
Updated: February 17, 2018
Updated: March 15, 2019, Carol Morman