

COURSE SYLLABUS

LAST REVIEW	Fall 2022
COURSE TITLE	AutoCAD Concepts
COURSE NUMBER	AMFT 0115
DIVISION	Career and Technical Education
DEPARTMENT	AMFT
CIP CODE	15.0406
CREDIT HOURS	4
CONTACT HOURS/WEEK	Class: 3 Lab: 2
PREREQUISITES	None
COREQUISITES	None
COURSE PLACEMENT	None

COURSE DESCRIPTION

The purpose of this class is to use AutoCAD as a means of learning fundamental 2D computer aided drafting design and modification. This course will cover opening and saving CAD files according to standard CAD Library methodologies. This course will show how to navigate tools to create and modify drawing files. The course will cover layer and object properties, Hatching, Attributes, as well as creating and importing from block libraries. Several trade specific and engineering CAD files will be created and modified such as electrical, mechanical and architectural. This course will instruct how to move from model space to paper space and utilize viewports to create drawings to specification that will be printed. Instruction will be provided on the various styles and approaches of adding dimensions to CAD files.

PROGRAM ALIGNMENT

This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit:

https://kansasregents.org/workforce_development/program-alignment

Program Learning Outcomes

1. The student will be able to assess hazards, mitigate risk, and develop procedures and protocol to create a safe working environment.
2. Student will be able to collaborate with team members in developing a plan to maximize efficiency in a production facility.
3. The student will be able to evaluate implicit tasks and identify necessary resources to install and maintain industrial equipment.

4. Student will be able to troubleshoot and repair industrial equipment in the high stress environment of modern manufacturing.

TEXTBOOKS

<http://kckccbookstore.com/>

METHODS OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE

- I. Annotations and annotation properties
- II. Attributes and attribute properties
- III. Computer aided Drafting Software programs.
- IV. Describe model space and paper space.
- IV. Fundamentals of various instructions
- V. Identifying Layer principles and properties.
- VI. Inserting and creating blocks.
- VII. Introduction to Autodesk, AutoCAD software
- VI. Objects and objects properties
- X. Principles of Dimensions
- XI. Principles of hatch
- XI. Principles of plotting
- XIII. Viewport and viewport properties

COURSE LEARNING OUTCOMES

Upon successful completion of this course, the student will:

- A. The student will be able to launch and save files from AutoCAD.
- B. The student will be able to utilize various commands and instructions in AutoCAD software to create drawings to specification.
- C. The student will be able to create and edit layers, annotations, blocks, attributes and hatch.
- D. The student will be able to apply dimensions according to specification.
- E. The student will be able to create and edit drawings in model space.
- F. The student will be able to apply paper space principles.
- G. The student will be able to plot drawings.

ASSESSMENT OF COURSE LEARNING OUTCOMES

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES

Student Handbook

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

College Catalog

<https://www.kckcc.edu/academics/catalog/index.html>

College Policies and Statements

<https://www.kckcc.edu/about/policies-statements/index.html>

Accessibility and Accommodations

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.