DRFT 2050

Division: Career and Technical Education
Department: Drafting Technology
Course: DRFT 2050
Title: Blueprint Reading
Catalog Description:
This course teaches the techniques of reading blueprints from industry. It covers layout, symbols, general notations, and specific notations. It is designed to help people already in industry to upgrade their skills.
General Education Requirements: N/A
Semesters Offered: TBA
Credit/Time Requirement: Credit: 2; Lecture: 1; Lab: 2
Clock/Hour Requirements: 45
Offered for Non-Credit: No
Prerequisites: None

Corequisites: None

Justification:
This course is approved by the program advisory committee.

Student Learning Outcomes:

Upon successful completion of this course, students will be able to:

- understand how prints are drawn
- understand multiview drawings
- understand section techniques
- understand dimensioning techniques and systems
- understand drafting layouts
- understand assembly and detail type drawings
- understand different types of symbols including threads and fasteners, weldments, keyways and keyseats, and spur and bevel gears
- understand basic geometric tolerancing
- understand material specifications
- understand sheet metal prints.

Content:

Course objectives will be achieved by providing students with instructional and hands-on experiences in the following areas:

- learning how to read a print

- sectional views and conventions
- dimensional values
- finish marks
- title blocks and layouts
- auxiliary views
- assembly and tabular drawings
- thread and fasteners
- weldments
- keyways and keyseats
- general dimensioning practices
- basic geometric tolerancing
- spur and bevel gears
- material specifications
- sheet metal prints.

General Education Outcomes:

2) Write clearly, informatively, and persuasively.
Students are required to complete descriptive term-sheets which provide information about the vocabulary and terminology used in this specific area. The descriptions are reviewed, graded, and returned to students for improvement.

6) Apply computational skills to a variety of contexts.
The field of drafting requires the combination of basic math, geometry, and algebra skills. Students will utilize these skills when producing drawings, cost estimates, and material lists.

Key Performance Indicators:

In class:

- Students will demonstrate mastery of course competencies by completing assignments/projects, tests, and quizzes. Assignments/projects are worth 75%, tests are worth 15%, and quizzes are worth 10% of the final grade.

Following class:

- Upon completion of the course, competency will be demonstrated in subsequent courses and on projects.

Representative Text and/or Supplies:

- *Blueprint Reading for the Technician,* current edition, Macmillan Publishing Company.

Optimum Class Size: 12
Maximum Class Size: 20

Signatures:

I hereby submit this course syllabus:

Craig Conder, ,

I hereby find this course consistent with the goals and resources of the Drafting Technology Department:

Craig Conder, , , Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)