

SYLLABUS

DIVISION: Business & Engineering Technologies

REVISED: 2015

CURRICULA IN WHICH COURSE IS TAUGHT: Precision Machining Technology

COURSE NUMBER AND TITLE: DRF 160 Machine Blueprint Reading

CREDIT HOURS: 3 **HOURS/WK. LEC:** 3 **HOURS/WK. LAB:** 0 **LEC/LAB COMB:** 3

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I. CATALOG DESCRIPTION:

DRF 160 Machine Blueprint Reading (3 cr.) Introduces interpreting of various blueprints and working drawings. Applies basic principles and techniques such as visualization of an object, orthographic projection, technical sketching and drafting terminology. Requires outside preparation. Lecture 3 hours per week.

II. RELATIONSHIP OF THE COURSE TO CURRICULA OBJECTIVES IN WHICH IT IS TAUGHT:

The course is designed to introduce the student to the basic principles of reading and interpreting engineering drawings of machine elements.

III. REQUIRED BACKGROUND:

None

IV. COURSE CONTENT:

Sketching	Sectional views
Working drawings	Tolerances & allowances
Sloping surfaces	Thread representation
Symbols	Welding representation

V. THE FOLLOWING GENERAL EDUCATION OBJECTIVES WILL BE ADDRESSED IN THIS COURSE

<input checked="" type="checkbox"/> Communications	<input type="checkbox"/> Personal Development
<input checked="" type="checkbox"/> Critical Thinking	<input checked="" type="checkbox"/> Quantitative Reasoning
<input type="checkbox"/> Cultural & Social Understanding	<input type="checkbox"/> Scientific Reasoning
<input checked="" type="checkbox"/> Information Literacy	

VI. LEARNER OUTCOMES**VII. EVALUATION METHOD**

Be able to freehand sketch orthographic and pictorial drawings.	Daily assignments and written tests
Demonstrate an understanding of working drawings: <ul style="list-style-type: none">• Understand line-types• Read drawing notes• Understand dimensions	Daily assignments and written tests
Understand sloped and skewed surface representation.	Daily assignments and written tests
Demonstrate an ability to read sectional drawings.	Daily assignments and written tests
Understand tolerances, allowances, and classes of fit.	Daily assignments and written tests
Understand English and Metric fasteners and thread representation.	Daily assignments and written tests
Understand welding and structural drawings.	Daily assignments and written tests

VIII. Over 90% of students will successfully complete this class.