SYLLABUS

DIVISION: Business & Engineering Technologies **REVISED: 2012**

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

==========

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

V. THE FOLLOWING GENERAL EDUCATION OBJECTIVES WILL BE ADDRESSED IN THIS COURSE (Place X by all that apply)

___X____Communications **___X____Information Literacy**

___X____Culture and Social Understanding

___X____Critical Thinking **___X____Scientific reasoning**

___X____Quantitative Reasoning_____X____Personal Development

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: • 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**

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