

# **7973 Drafting III – Engineering**

## **Course Syllabus**

**Instructor's Name:** Mark Underwood

**Classroom Number:** 418

**Tutoring Times:** 3:30 – 4:30 M, Tu, Th, Fr. Please give one day advanced notice if you wish to stay after school for tutoring

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**Moodle:** My Moodle page can be accessed through the UCPS link to Moodle High

### **Course Description:**

This course-Drafting-Engineering III introduces students to the use of graphic tools necessary to communicate, analyze, and understand the concepts found in the areas of engineering, science, and mathematics. Topics include job seeking and interview skills, the engineering design process, constraint-based parametric modeling, threads and fasteners, working drawings, basic geometric dimensioning and tolerancing, and portfolio development.

### **Course Objectives:**

#### **A. LEADERSHIP**

501.00 Demonstrate job-seeking and interview skills.

#### **B. THE ENGINEERING DESIGN PROCESS**

502.00 Apply the concepts and principles of the design process.

#### **C. CONSTRAINT-BASED/PARAMETRIC MODELING**

503.00 Demonstrate the concepts and principles of constraint-based/parametric solid 3D modeling.

#### D. THREADS AND FASTENERS

504.00 Construct various types of thread and fastener representations and their annotations.

#### E. WORKING DRAWINGS

505.00 Demonstrate working drawing principles and techniques.

#### F. BASIC GEOMETRIC DIMENSIONING AND TOLERANCING

506.00 Demonstrate basic geometric dimensioning and tolerancing techniques.

#### G. PORTFOLIO DEVELOPMENT AND REPRESENTATION

507.00 Demonstrate portfolio development techniques.

#### **Grading Policy:**

The semester will be divided into 3 six-week periods. Each six weeks will count 25% of the final grade and the final exam will count 25%. The final exam cannot be exempted. The six week grades are awarded on a point system as follows:

Major Tests:	50 – 100 points
Major Projects:	50 – 100 points
Classwork, quizzes and other assignments:	10 – 50 points

The grade is determined by the percentage of Total Points Earned divided by Total Possible Points.

#### **Supplies Needed:**

Each student is required to have a notebook, or a section of a notebook specifically for this class. Each student is responsible for keeping up with Handouts and class notes. If a student is absent it is their responsibility to find out what information is needed for their notebook.

#### **Classroom Policies and expectations:**

1. All necessary materials will be brought to class every day
2. Make-up work is the student's responsibility. A student has 2 days per each day missed to make up missed work.
3. Cheating will not be tolerated.
4. Everyone is to be treated with respect. If the teacher or another student is speaking they deserve your attention.
5. Every student should be seated and ready to learn when the tardy bell rings.