

Flat Rock Community High School
25600 Seneca
Flat Rock, MI 48134
734-535-6600

Course Name: Engineering Drafting I & II

Course Number: 820FR-1 & 820 FR-2

Course Credit: 3

School Year: 2008-2009

Instructor: Lowell E. J. Yoas

Course Description: The students will learn the use of manual Drafting equipment and Computer Aided Design software to meet the State of Michigan's 12 segments in their Curriculum Standards; 1 - Safety, Drawing and Classroom Procedures, 2 - Geometric Construction, 3 - Orthographic Views, 4 - Dimensioning & Tolerancing, 5 - Sections, 6 - Pictorial Drawings, 7 - Fasteners, 8 - Residential Architecture, 9 - Descriptive Geometry, 10 - 3D Parametric Drawing, 11 – Leadership/Employability Skills, and 12 – Assembly/Working Drawings. In addition the students will have the ability to experience animation software.

Course Objectives: The goal of this class is to prepare the students to meet the requirements set by the State of Michigan, prepare the students for further education/technical training in Drafting/CAD or Engineering programs or entry level position using their Drafting/CAD skills

Student Competencies: State of Michigan's 12 Segments

Required Text: Provided by instructor

References & Other Resources: Machinery Handbook and Internet

Course Advisory Committee: Randy Gibbs (Chairperson), Kyle Adkins Jr., Dennis Bandy, Joel Bias, Jim Centlivre, Dan Chrenko, Laura Draper, Christine LeDee, Karen Mancini, John Nasarzewski, Patti Sisler, Joe Slifka, Martin St. John, Mike Toschi, Don Ukrainec, Kyle Van Dyne, Nick Vontroba, Malin Wagner, David Watters, Ken Wright, Lowell Yoas

Class Assignments: Assignments may vary with the students abilities but will include all of the State of Michigan's 12 segments while using a combination of manual Drafting and CAD skills. The students will also be required to complete a resume and be exposed to the interview process, form a class/student government, participate in MITES competitions, and mentor lesser experienced students.

Final Exam: The final exam will be 20% of the student's grade. It will be comprised of two portions, written and drawing. The written will be 1/3 of the exam grade with the drawing being the final 2/3.

Class Policies: All are in line with the Flat Rock Community High School Student Code of Conduct which is in the student handbook.

Evaluation & Grading: Participation (20%) grades are posted weekly while units/projects (50%), and assessments (30%) are posted upon completion. The Grade scale is in the student handbook.

Course Outline: 1 - Safety, Drawing and Classroom Procedures, 2 - Geometric Construction, 3 - Orthographic Views, 4 - Dimensioning & Tolerancing, 5 - Sections, 6 - Pictorial Drawings, 7 - Fasteners, 8 - Residential Architecture, 9 - Descriptive Geometry, 10 - 3D Parametric Drawing, 11 – Leadership/Employability Skills, and 12 – Assembly/Working Drawings.

Articulation Agreements: Monroe County Community College, Wayne County Community College, and Henry Ford Community College.