West De Pere High School Technology Education Department

Basic Manufacturing Processes

Instructor: Mr. Glinski

Office: B 153

Phone: 338-5200 ext. 4310

Course Description:

This course introduces machining, stamping, casting, forming, and joining of materials. It covers basic machine processes use to form materials to desired specifications and includes manufacturing of materials, heat treatment, foundry work, and shaping processes. This course focuses on a process that joins Design/Engineering with the Construction/Production through the use of 3D modeling software and additive and subtractive manufacturing processes. The concepts will be taught through a series of hands on lab activities.

Pre-requisites: none

Students are encouraged to have taken Fundamentals of Drawing or Parametric Modelling and Machine Shop I.

Course Objectives:

Upon completion of this course students will be able to:

- Describe how technology is important in today's society
- Demonstrate safe practices in a modern, multi-functioning lab environment
- Accurately read dimensioned engineering drawings
- Use basic manufacturing equipment
- Demonstrate professional skills and methods of today's engineers

Attendance and Make-up work:

Much of the content in this course is sequential; therefore, it is expected that you will attend each class period. Attendance and tardiness problems will have a detrimental effect on your course grade. Not being present for demonstrations will prevent you from properly completing laboratory activities and/ or could become a safety hazard for you and those around you.

Evaluation:

The grade earned in this course will be determined by the quality of student work based on the parameters outlined by the instructor. Students will be evaluated on several laboratory projects and activities, quizzes, exams, and participation.

Grade distribution

rade distribution	M		
 Assigned I 	50%		
o Eng	gineering Art	icles	
 Participation 	30%		
o Dis	cussions		
o Cle	an-up / Misc		
o **(GAMES**		
• Exams and	20%		
92-100	A	72-77	C
90-91	A-	70-71	C-
88-89	B+	68-69	D+
82-87	В	62-67	D
80-81	В-	60-61	D-
78-79	C+	0-59	F

Weighted Grades

$$A = 5.0 A - 4.67 B + 4.33 B = 4.0 B - 3.67 C + 3.33 C = 3.0 C - 2.67$$

Lockers: You will be assigned a locker in the metal shop. You will need a combination lock for your locker and need to file the combination with instructor.

Materials needed:

- Lock
- SAFETY GLASSES

Lab Clean-up Procedures:

- Clean-up begins 8 minutes before the bell rings
- Any tools or equipment used must be cleaned and put away
- All table tops will be brushed off
- NOBODY will leave the room until the instructor approves all stations

SAFETY GLASSES WILL BE WORN AT ALL TIMES IN THE LAB!!!