

Principles of Manufacturing 2018-2019

Course Information:

This course is project-based course designed to provide the student with knowledge, skill, and a technology background in order for them to pursue craft, technology training, community college and apprenticeships, or college and university; and to prepare the student for workforce readiness. Emphasis will be placed on basic skills, safety, techniques, and project applications that apply to the manufacturing industry. This course is the prerequisite for the welding 1 class and Precision Metal Manufacturing.

Teacher Information:

Instructors: Tim Sherwood

Tim Sherwood – timothysherwood@misdmail.org

Text, Readings, Materials:

Metal Fabrication Textbook, Google Classroom, AWS SENSE Curriculum, Google Drive.

Required Materials:

Clothing - Jeans (no holes or frayed edges), Long Sleeve Cotton Shirt, Boots (can be steel toe).

Technology – We will be using technology with internet capability every day for coursework and online curriculum. If you do not bring it, you will not be able to complete assignments for class.

Course Calendar/Schedule:

Safety instruction will be on-going throughout the semester. This is a tentative schedule that is intended to be flexible and is subject to change depending on needs of students and progressions during the semester.

Week 1: Introductions, team building activities, classroom rules, procedures, and expectations, what is manufacturing, use of technology in this class, and career goals and employability.

Week 2: History of Manufacturing, Technological Systems, Problem Solving

Week 3: Intro to Shop Math, Measurement

Week 4: Creating and Reading Working Drawings

Week 5 & 6: Safety and Standards

Week 7: Cutting Process

Week 8: Welding Basics

Week 9: Machining Operations

Week 10, 11: Manufacture 1st Project

Week 12 & 13: Design and Manufacture Individual Project

Week 14: Manufacturing and Marketing for Mass Production

Week 15: Maintenance and Preventive Maintenance

Week 16: Career Exploration

During this 18 weeks course we will cover basic safety, tool use and identification, job skills, careers in manufacturing, measurement, how to read and draw detail schematics, manufacturing processes such as welding, machining, product design, production, and product marketing.

Certifications:

There are NO certifications offered at the end of the introductory course. This course leads into others that will offer certifications such as the 10-Hr OSHA certification and AWS Weld Certifications.

Grading Policy:

Major Grades – 40% (tests, projects, lengthy assignments, etc...)

Daily Work - 60%

First Six Weeks = 26% Second Six Weeks = 27% Third Six Weeks = 27%
Semester Exam = 20%

A	90-100
B	80-89
C	70-79
F	Below 70

An “Incomplete” (I) reflects incomplete student work and is not considered an academic grade.

*See MISD Board Policy EIC (LOCAL).

Clubs:

Students are encouraged to join and participate in afterschool activities such as the MISD Shine Runners Solar Car Team, Ben Barber Welding Club, FFA, and SkillsUSA.

Class Rules:

All regulations found in the Students Technology Use Guidelines, Maintaining a Healthy, Active LAN, and Classroom Management Plan will be in place at all times. Students will not be allowed usage of any computer in the lab without parent/guardian signature on these documents and on file with the instructor.

The student may make arrangements to come before school, during break times, or after school to do make-up work per the MISD policy as stated within the Student Handbook as long as it is pre-arranged with the instructor. It must be noted that the student is responsible for making these arrangements within the scope and time allowed – not the teacher.

Tardiness: Any Tardy to class will be treated per student handbook and regulations. If a Student is tardy 15 minutes after class is scheduled to start or re-start, they will be counted as absent. Any missed exams or assignments will be treaded according to the MISD Policy.

Academic Dishonesty – cheating or plagiarism – is not acceptable. Cheating includes the copying of another student's work – homework, class work, test answers, projects, etc – as one's own. Plagiarism is the use of another person's original ideas or writing without giving credit to the true author. A student found to have engaged in academic dishonesty will be subject to loss of credit for the work in question, as well as disciplinary penalties, according to the Student Code of Conduct.

Work Clothes – Students are required to have proper work wear when we are going into the welding lab. We will not need these clothes everyday and the instructor will give notice before any activities are done in the lab. Students must have closed toed shoes (preferably leather boots), long denim pants (without holes or frays), and a long sleeve 100% cotton shirt in the weld shop and short sleeve in the machine shop. Students will be provided one pair of safety glasses if they lose or break them, the student is responsible for buying another pair or they will not be able to work in the lab and will be given zeros for all lab activities until they are replaced. Students must wear ear protection in the lab when work is being done. Students will be given a pair of reusable ear plugs or ear muff to use during class.

SEMESTER EXAMS

Each semester, specific exam schedules are designated for MISD high school and dual credit courses. These schedules must be followed. Neither mid-term nor final exams are given early. If a student is absent on the day of an exam he/she will take the exam at a date/time designated by the school. A student is expected to contact the course teacher to schedule a make-up time for a **first semester exam** missed because of student absence. A student is expected to contact the school counseling department

to schedule a make-up time for any **second semester exam** missed because of student absence.

LATE WORK

- Teacher designates due date and time for assignment (Beginning of class period, End of class period, designated time of day)
- If student fails to meet the due date and time, then the student has till the next class period (next A day or B day) to turn in assignment to be considered one day late.
- Students will be assessed a penalty of 30% points for up to one class period late.
- Score of a zero may be given for work turned in after one day late.
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MAKEUP WORK (because of absence for any class missed)

- The teacher may assign the student makeup work based on the instructional objectives for the subject or course and the needs of the individual student in mastering the essential knowledge and skills or in meeting subject or course requirements.
- A student will be responsible for obtaining and completing the makeup work in a satisfactory manner and within the time specified by the teacher. When absent, the student is afforded the number of days missed plus one additional day to turn in makeup work. [A/B Block Example: A student misses Monday and Tuesday of the week and he/she returns on Wednesday of that same week. Student work from Monday's absence is considered late after Friday, and student work from Tuesday's absence is considered late after the following Monday.]
- A student who does not make up assigned work within the time allotted by the teacher will receive a grade of zero for the assignment.
- A student is encouraged to speak with his/her teacher if the student knows of an absence ahead of time, including absences for extracurricular activities, so that the teacher and student may plan any work that can be completed before or shortly after the absence.
- A student will be permitted to make up tests and turn in projects due in any class missed because of absence. Teachers may assign a late penalty to any long-term project in accordance with time lines approved by the principal and previously communicated to students.
- See UIL Eligibility ("No Pass/No Play") guidelines for additional information related to grades and UIL Eligibility.

TEST RETAKES

- Students will be allowed to demonstrate proficiency of learning objectives by means of retest. **This course focuses on mastery/competency and quality. Please see the Student Handbook** for all the details that are involved per District Policy. There is no midterm exam for this course. The final exam – **Quality Assessment Project** – is not included in the retake/retest policy.
- Students who fail a major test/assessment (below 70%) will be allowed to retake or correct up to a 70% grade. This does not include semester examinations.
- Students are expected to make arrangements with the teacher to retake or correct a major test/assessment.
- Students are encouraged to participate in tutoring opportunities before retaking a test.
- Each teacher will communicate routine requirements for retakes and corrections in his/her course syllabus.

- All retakes or corrections must be completed prior to the end of each six week grading period unless the student is afforded time, after the six week grading period, as a result of the district's absent/make-up guidelines.
- See UIL Eligibility ("No Pass/No Play") guidelines for additional information related to grades and UIL Eligibility.

ACADEMIC HONESTY & INTEGRITY

Honesty is extremely important and expected. Teachers determine what constitutes cheating and/or plagiarism.

Consequences for academic dishonesty

Daily Work

- Every Offense
 - Academic and Disciplinary Consequences
 - Assign grade of zero
 - Write a referral
 - Teacher contacts parents
 - Consequence from administrator would be a minimum of AC placement

Exams or Other Major Assessments

- Every Offense
 - Academic and Disciplinary Consequences
 - Assign grade of zero
 - Write a referral
 - Teacher contacts parents
 - Consequence from administrator would be a minimum of AC placement
 - An alternative exam or major assessment can be completed for a maximum grade of 70%

Academic Associate is notified and will schedule a meeting with student, parent and teacher

WEIGHTED CREDIT

Per MISD Board Policy EIC (LOCAL):

- The District uses a weighted numerical grading system. In calculating GPA, ten points (per semester) shall be added to a student's average in Advanced Placement (AP) courses, Pre-AP courses, Academic Decathlon, and courses considered to be District-approved college level dual credit courses. All other courses shall not receive weighted points for completion.
- No weighted credit point shall be added for grades lower than 70.
- Weighted grading shall be reflected in the student's GPA and not numerically per course on either the student's report card or transcript.

UIL ELIGIBILITY ("No Pass/No Play")

- Semester grades are computed by averaging the numerical grades recorded for each of the three six week reporting periods.
- Each six week grading period will stand alone for eligibility purposes.

- A student who is declared academically ineligible after a six week grading period will be able to regain eligibility if all of the student's grade averages are 70% or higher at the subsequent 3 week grade reporting period.
- See MISD Board Policy FM (LOCAL) – Exempt Courses.

STUDENT WORK

The amount of time needed to complete assignments may vary with each student's study habits, academic skills and selected course load. This includes major projects such as research reports, book reports, major essays, and other assignments teachers designate as major projects.

POSTING STUDENT WORK

Student grades will be posted in Skyward parent portal within five business days for daily grades and major grades. Special consideration is given to major projects, including lengthy writing assignments.

I look forward to having you (or your student) as a student and working with you for your success in this course.

Sincerely,
Tim Sherwood

Parent
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