

Online format has been used

**MFG-160-60 Materials/Metallurgy WINTER 2020**

**Instructor:**

Lecture: Brian Scilzo e-mail: scilzobrianm@jccmi.edu

Location : Online Course

**Meeting Information:**

Online

**Course Description:**

This course will provide the student with a working knowledge of the properties, uses, and treatment methods used to alter the properties of commonly used metals and alloys. This knowledge may be applied to the design, selection, processing and testing of metal parts.

Prerequisite: MFG 105

**Course Outcomes:**

Upon completion of this course the successful student will be:

Introduce to Industrial materials and their structure.

Able to identify and explain the mechanical properties of materials.

Able to identify and explain the physical and chemical properties of materials.

Able to discuss ferrous materials, their properties and uses.

Able to discuss non-ferrous materials, their properties and uses.

Able to discuss common alloy materials, their properties and uses.

Able to discuss common tool steels, their properties and uses.

Able to explain how heat treatment and surface treatment are used to alter properties of materials.

Able to list and explain causes and prevention of mechanical failures related to heat treatment.

**Text:**

Various Handouts and Other Materials will be used in the course

**Grading Procedure:**

Your final grade will be posted in e-services at the end of the semester. Final grades will be determined as follows:

Tests =60% Project Work =40%

The labs and field trip will not be conducted for the online course, but will be discussed.

**Grading Scale:**

94-100 = 4.078-83 = 2.560-65 = 1.0

89-93= 3.572-77 = 2.055-59 = 0.5

84-88 = 3.066-71 = 1.5 0-54 = 0.0

A 2.0 or "C" is a passing grade. Only courses with passing grades count toward graduation or a certificate. Other colleges transfer in only courses with passing grades. Many financial aid sources, including most employers, require passing grades.

### **Tests:**

No makeup tests will be given. A missed test will be recorded as 0 points.

Calculators are allowed. Both tests will be open book; however, PDAs and smart phones may not be used during tests.

### **Incompletes**

No incomplete grades will be given in this class except under extraordinary circumstances and if the student has completed at least 75% of the work and has at least 2.0 in the course. The grade of "I" is not awarded to students who did not attend, or seldom attended, or to those who simply are not pleased with their final grades. Students receiving an "I" may submit the remaining work during the next class offering by attending the remainder of the class. Or, talk to me about specific arrangements to complete the remaining work in a manner that is acceptable to me. Students do not redo work that had already been graded. Of course, students can drop the class up to the drop deadline as specified on the website calendar. See

[http://www.jccmi.edu/studentservices/registration/grading\\_system.htm](http://www.jccmi.edu/studentservices/registration/grading_system.htm) for more info

### **Please Note:**

"Students with disabilities who believe that they may need accommodations in this class are encouraged to contact the office of Learning Support Services at 787-0800, extension 8270/8553 as soon as possible to ensure that such accommodations are implemented in a timely fashion."

### **Academic Honesty Policy**

The JCC Academic Honesty policy states that **academic honesty is expected of all students**. It is the ethical behavior that includes producing their own work and not representing others' work as their own, either by plagiarism, by cheating, or by helping others to do so. **Cheating is obtaining answers/materials from an outside source without authorization.** Cheating includes, but is not limited to: Plagiarizing in all forms, using notes/books without authorization, copying, submitting others' work as your own or submitting your work for others, altering graded work, falsifying data or exhibiting other behaviors generally considered unethical.

**Plagiarism is the failure to give credit for the use of material from outside sources.**

Plagiarism includes but is not limited to: Using data, quotations, or paraphrases from other sources without adequate documentation, submitting others' work as your own, or exhibiting other behaviors generally considered unethical. **Faculty members who suspect a student of**

**academic dishonesty may penalize the student by taking appropriate action up to and including assignment a failing grade for the paper, exam, or the course itself.**

<http://www.jccmi.edu/administration/deans/Policies/Academic%20Honesty%20Policy.doc>

**Other notes:**

Check Jetnet regularly, for information on the class; including topics to cover, and assignments. This will be our primary means of communication for this course.