ME241
Materials Laboratory
SPRING 2014

Instructor: Hamid Nourollahi
Dept. of Mechanical Engineering
E-mail: hdnourollahi@aol.com

Class Time: Sec (2) Mon 11:00 am - 13:40 pm  Office: E-323C
Sec (1) Mon 16:00 pm - 18:40 pm  Office Hours: M 9:30 - 10:30 Am
Sec (3) Wed 16:00 pm - 18:40 pm  Wednesday 12:30 to 1:30
Sec (4) Fri 13:00 pm – 15:40 pm

Room: EL 105

Text: Machine Shop Essentials
By Frank Marlow, Metal Arts Press (2004)

Grading:

PART 1: Machining (includes safety exam, and group report)  (pass/fail)
PART 2: Materials (6 reports for 6 labs)  60
ATTENDANCE/INSTRUCTOR EVALUATION:  10

Total: 70

Plus/Minus Grading System will be used for final grade.

Students will need to score 30 points out of 30 points in the Online Safety Test in order to qualify for the machining lab. This test is a multiple attempt test.

All course information in addition to this note can be found on blackboard.
Materials Covered:

The course is divided into two parts. Machining and Materials

Week 1: General Introduction to the course followed by introduction/orientation to machine shop.

PART 1: MACHINING

Week 2: Machining exercises
Week 3: Machining exercises
Week 4: Machining exercises
Week 5: Machining exercises
Week 6: Machining exercises

PART 2: MATERIALS (tentative order)

Week 7: Materials Survey
Week 8: Hardness testing
Week 9: Cold working
Week 10: Phase diagrams
Week 11: Materials Survey
Week 12: Ductile-to-Brittle Transition
Week 13: Tensile testing