EMEC 100 INTRODUCTION TO MECHANICAL ENGINEERING

FALL 2013

Instructor: Dr. David Miller

CATALOG DATA:
EMEC 100 – INTRODUCTION TO MECHANICAL ENGINEERING: F 1 credit (1 lecture).
The mechanical engineering profession, logical process of problem solving and design, professionalism, ethics.

TEXTBOOK:
None.

INSTRUCTOR:
Dr. David A. Miller, Roberts 306C, 994-6285, dmiller@me.montana.edu
Office Hours: T,Th 2:00-3:00, W 3:00-4:00 or by appointment. Drop-ins accepted.

ENTRANCE EXPECTATIONS:
None required.

COURSE OBJECTIVES:
The objective of EMEC 100 is to acquaint students with the character and scope of mechanical engineering as a curriculum and as a profession.

CLASS SCHEDULE:
This class has four sections: Section 01 - Tuesday 8:25-9:15  Rob 218
Section 02 - Tuesday 9:50-10:40  Rob 218
Section 03 - Thursday 3:10-4:00  Reid 402
Section 04 – Wednesday 9:00-9:50  Reid 201

COMPUTER AND LABORATORY USAGE:
Students will be required to complete homework assignments using basic software packages, not to exceed common graphing and word-processing programs. All homework must be typed and submitted electronically through the educational delivery program utilized at MSU, D2L.
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COURSE LEARNING OUTCOMES:
Upon completion of this course, students will have demonstrated an understanding of:

1. the Mechanical Engineering program at MSU
2. how to work effectively toward success in the mechanical engineering curriculum and profession, including decision making, team work, and communication skills.
3. the basic analytical areas of mechanical engineering and their interrelationship through the 4-yr curriculum.
4. investigate potential employment opportunities for ME undergraduates (internships or co-ops) and graduates.
5. the role and importance of oral, written and graphical communication.
6. the relationship of technology and society and the importance of professional ethics.
7. the importance of modeling and simulation in mechanical engineering.
8. the foundational roles of design and manufacturing in mechanical engineering

SPECIAL NEEDS INFORMATION:
Students with special needs or requiring special accommodations should contact the instructor or the campus Disabled Student Services Office at the earliest opportunity.

STUDENT CONDUCT
Students are expected to conduct themselves in accordance with the MSU Student Conduct Guidelines (http://www2.montana.edu/policy/student_conduct/), including the areas of academic honesty, behavior, and responsibilities.

ASSESSMENT AND EVALUATION:
The course outcomes will be evaluated, and the final letter grades will be based on the following criteria (standard grade distribution will be followed):
1. Professionalism = 40%
   • Attendance at weekly class meetings (limited and reasonable absence may be excused by prior notification of instructor)
2. Weekly homework and labs= 60%

COURSE WEBSITE:
All course content will be distributed and collected through the Desire2Learn (D2L) account available from a link at www.Montana.edu.

For course information, the syllabus will be found at http://www.coe.montana.edu/me/faculty/miller/teaching.