Instructor: Dr. Judah Ari-Gur, Room F-246, E-mail: judah.ari-gur@wmich.edu, Tel.: 276-3419
Office Hours: Mon. 2-2:50; Thur. 1-1:50.
Corequisites: MATH 1700 or MATH 1220.

OBJECTIVES
To teach students the relationships between the fundamental principles of mathematics and sciences and the mechanical engineering profession.
To practice problem solving in the various areas of mechanical engineering.
To engage students in design activities.
To engage students in engineering team work.
To practice technical communication skills.
To prepare students for the mechanical engineering program at WMU.
To instill good study habits.

TOPICS (not necessarily in order of coverage)
Introduction (scope and tools of profession)
Equilibrium and its failures
Materials and their failures
Structures and their failures
Fluid flow and its forms
Heating and cooling
Noise and vibration
Engines
Power sources and transmission
Manufacturing processes and plants
Engineering disasters and ethics
Project presentations and technical reports

GRADING (!!! 2019 Due Dates !!!)
Homework assignments - 10% (as assigned)
Quizzes - 10%
Midterm exam - 20% (Tue., 26 Feb.)
Project 1 - 20% (Tue., 19 Feb.)
Project 2 - 20% (Thur., 11 Apr.)
Final exam - 20% (Thur., 25 Apr., 2:45-4:45)

A=90%- ; BA=85%- ; B=80%- ; CB=75%- ; C=70%- ; DC=65%- ; D=60%- 

ALL THE ASSIGNMENTS MUST BE SUBMITTED UNTIL DUE DATE.
LATE SUBMISSIONS WILL NOT BE ALLOWED (=ZERO GRADE) !!
Regarding the textbook:
The University Libraries will have on a 2-hour course reserve (at the Waldo Library front desk) the

Additional information
1. For the quizzes and exams you are allowed to use only the calculators which are approved for use in
(This will help you to prepare for the eventual licensed Professional Engineer title that you may aspire
to acquire. Read about it: http://ncees.org/audience-landing-pages/students/)
2. Quiz dates are not announced in advance. It is your responsibility to always have an allowed
calculator with you in class. There are no makeup dates for quizzes.
3. The use of a cell phone, computer, tablet or any equivalent device in the classroom is not allowed.
4. It is your responsibility to attend class, take careful notes and follow instructions. If anything is not
clear, ask.
5. If you send me an e-mail with a question, you will get the answer through e-mail. If I decide that the
answer may benefit the entire class, I will send the question and answer to the entire class. In that
case, I will modify the e-mail to ensure that I protect your identity.
6. Homework is a written communication between you and the instructor. Please make sure that it is
neat, clear, readable and logically outlined. Write only on one side of the paper, with not more than 2
problems per page. Draw a bold horizontal line across the page to separate between problems. Staple
all the pages together in the correct order. All the stapled papers must be of the same type. Write
your name clearly, using UPPER CASE letters, on the front page. If these instructions are violated, the
homework may be rejected, including a grade of zero.
(The format for the solution of homework problems will be detailed and explained in class.)
9. Homework is due at the beginning of the class. Please place it on the instructor’s table.
10. When you send me an e-mail, please start the subject line with ME2615. It will draw my attention and
help me to prioritize it.

Academic conduct
Students are responsible for making themselves aware of and understanding the University policies and
procedures that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and
forgery, multiple submission, plagiarism, complicity and computer misuse. The academic policies addressing
Student Rights and Responsibilities can be found in the Undergraduate Catalog at
http://catalog.wmich.edu/content.php?catoid=30&navoid=1263. If there is reason to believe you have been
involved in academic dishonesty, you will be referred to the Office of Student Conduct. You will be given the
opportunity to review the charge(s) and if you believe you are not responsible, you will have the opportunity
for a hearing. You should consult with your instructor if you are uncertain about an issue of academic honesty
prior to the submission of an assignment or test.