MEEN 617 – DYNAMICS AND VIBRATIONS SPRING 2014

INFORMATION YOU SHOULD KNOW

- Read/understand syllabus & learn about class policies, exams schedule, assignments schedule, etc.

- There are two exams (in class) + final + homework (assignment). **NO CURVE!**

Homework	25%
First Exam	25%
Second Exam	25%
Final Exam	25%

- No unexcused absences for missing exams and other assignments. **To justify an absence** http://student-rules.tamu.edu/rule07
-
- Pre-requisites are mandatory. Review on your own **MATH** (matrices and vector algebra & differential equations) and UG **Dynamics**.

- Assigned (recommended) problems are **NOT** graded. Partial solutions to assigned problems are available. Complete solutions **NOT**

- Visit class WEB site **often** for updates http://rotorlab.tamu.edu/me617/default.htm (posted worked examples, lecture notes, etc).

- Homework to be worked in **GROUPS** No individual work accepted. (Min=3, Max=6 students).

- **English – syntax and grammar ARE important and will be graded in exams, computational assignments (homework), and project – 40% of grade**

- The use of technical Language when asking questions is highly desirable. Name “things” correctly.

- Lecturer will **rarely solve** a problem in class. You must know how to do it before hand. Lecturer will only explain what is important in establishing the RIGHT physical model and interpreting the found SOLUTION.

- You are a **responsible adult**. You do **not** need to be reminded about the impending exam, homework, the need to review past material, learn current material, etc.

- The only way to learn VIBRATIONS is by solving lots and lots of problems. Follow a sound method, stating assumptions, deriving equations governing motion, solving them to find system performance, etc.

How to get an A in MEEN 617

- **Read/study** lecture notes & textbook chapters before class time.
- **Rework** (not read) problems solved in textbook, lecture notes, and posted on web site.
- **Work with other students** analyzing and solving problems and discussing significance of results (calculations). Learn to organize a problem solution. Practice how to ask the right questions.
- **Use office hours effectively**. Do not ever come unprepared. Show **neat work** so anyone else (I) can understand it quickly. A statement like "I can't get the right answer," is meaningless unless you also show a logical procedure leading towards a solution.
- **Imagine how things work!**
- **Work assignments (homework and project) ahead of time**. Do not wait for the night before to start and complete the work.

- **Listen to lecturer.** He will repeat over and over a concept or idea or solution. You will then know it is important for him and you. You will probably be tested on that particular concept.

- **Sleep well** the night before **and be awake** when coming to class.

- **You and I are on this together. Your job is to learn by attending lectures, reading & understanding the material, by working many, many problems, by improving your communications skills (oral & written).**

My job is to show you how physics in conjunction with mathematical models allow engineers to PREDICT the PERFORMANCE of mechanical systems and to DESIGN better systems with an intended function.

Sir Francis Bacon, pioneer of the modern experimental sciences [1600's], wrote:

"Reading maketh a full man.
Conference a ready man, and
Writing an exact man"

from
The Elements of Style,
by W. Strunk and E.B. White

"Vigorous writing is concise. A sentence should contain no unnecessary words, a paragraph no unnecessary sentences, for the same reason that a drawing should not have unnecessary lines and a machine no unnecessary parts. This requires NOT that the writer makes all his sentences short, or that he avoids all detail and treats his subjects only in outline, but that every word tells."