SYLLABUS & COURSE INFORMATION
MEC 214  PROBABILITY AND STATISTICS FOR MECHANICAL ENGINEERS
SPRING 2008

Instructor:  Prof. Thomas Cubaud, 155 Light Engineering Building, 2-9431
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Time and Location:  Tu 11:45–12:40pm, Physics P112

Office Hours:  Wednesday 11:00-12:00pm

Teaching Assistant:  None

Text:  None. A manual will be provided online at no charge.

Assignments:  Three Homework problems will be assigned. No late homework will be accepted, except under documented emergencies.

Exams:  One final exam.

Grading:  Final exam: 60%, Homework: 40%

Course Objectives:  The emphasis in this course will be on the foundations of probability and statistics as applied to mechanical measurements and experimentation. Basic statistical analysis of data and assessing likelihood of future events. Concepts of random sampling. Uncertainty analysis and error propagation, using both analytical and graphical tools. Assessing dominant sources of error in measurements.

Prerequisites:  MAT 132 or MAT 126 or AMS 151; MEC Major or Permission of the Instructor
Co-requisites:  MAT 203 or MAT 127 or AMS 161

Credit earned:  1 credit
Statement on Academic Dishonesty

Academic dishonesty is an extremely serious offense and will not be tolerated in any form. Academic dishonesty in general is the presentation of intellectual work that is not originally yours. Examples include, *but are not limited to*, copying or plagiarizing class assignments including homework, reports, designs, computer programs, and other submitted materials; copying or otherwise communicating answers on exams with other students; bringing unapproved aids, either in physical (written) or electronic form to an exam; obtaining copies of an exam prior to its administration, etc. Academic dishonesty violates both the ethical and moral standards of the Engineering profession and all infractions related to academic dishonesty will be prosecuted to the fullest via the CEAS CASA committee. For you, the honest student, academic dishonesty results in lower class curves, hence a depression in your GPA and class standing, while cheapening the degree you earn.

Calculator Policy

Effective spring, 2008 only the following calculators will be permitted to be used on all midterm and final exams in the Department of Mechanical Engineering. There will be no exceptions! This list of calculators is identical to that allowed for the *National Council for Examiners for Engineering and Surveying* (NCEES) Fundamentals of Engineering (FE) exam that many of you will take in your senior year, as well as the Professional Engineering (PE) exam that you may take several years from now. The sooner you become comfortable on one of these calculators, the better.

NCEES Allowed calculators as of spring, 2008:

- **Casio:** All *fx-115* models. Any Casio calculator must contain *fx-115* in its model name.
- **Hewlett Packard:** The *HP 33s* and *HP 35s* models, but no others.
- **Texas Instruments:** All *TI-30X* and *TI-36X* models. Any Texas Instruments calculator must contain either *TI-30X* or *TI-36X* in its model name.

The NCEES policy on calculator can be found here:
http://www.ncees.org/exams/calculators/