

# MAE 340 --- Systems Analysis

## CONGRATULATIONS!

**You are at the beginning of a milestone course in your engineering education!**

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Office Hrs: By appointment

**e-mail questions always welcome!**

Goals:

1. To learn how to model many different types of physical and/or engineering systems in standard linear form.
2. To learn how to analyze a linear model in the time domain, in the frequency domain, and in the Laplace domain.
3. To use your modeling and analysis skills to better understand the design and performance of engineering systems of all kinds.

Textbook: Shearer, J.L., Kulakowski, B.T. and Gardner, J.F., Dynamic Modeling and Control of Engineering Systems, Second Edition, Prentice Hall, 1997.

Approximate range of Material: Chapters 1-14

Course Website: <http://www.eng.buffalo.edu/Courses/mae340>

Use of the computer program MATLAB is also mandatory. Some help will be available at times but students should expect to go through the tutorials to learn usage.

Supplementary textbooks and solution manuals are in the SEL Reserve (2-hour limit).

Grading: Homework (includes labs) 25%, Tests 37.5%, Final Exam 37.5%

- ❑ Any Grading appeals must be submitted first IN WRITING. Return the disputed work along with a short written note explaining why you think the grade is incorrect.
- ❑ Honesty: We take the university rules about academic honesty very seriously. Students are expected to do their own work. Cheating will result in grading penalties for the course. Some of the laboratory reports are to be submitted as "group reports". In those cases, the submission of a report with the names of all group members implies that everyone has done their fair share of the work. For individual laboratory reports, you are encouraged to work with your group on calculations and graph preparation. However, all of the written material should be prepared individually. The answers to questions that are part of the individual laboratory reports should also be prepared and composed on an individual basis.
- ❑ Lab Attendance is MANDATORY.

Learning is ALWAYS the responsibility of the student; it may be enhanced by free and open interaction with the instructor. Active participation in class is strongly encouraged, since ...

**The only stupid question is the one that is not asked.**