

Z. Chambers (D-109, 877-8904)

Zachariah.Chambers@rose-hulman.edu

TEXT:

Baker, AJ and Pepper, DW, Finite Elements 1-2-3,
McGraw-Hill, Boston, 1985.Baker AJ, Taylor MB, and Chambers Z,
Finite Elements for Engineering Applications, 1st Ed.,
University of Tennessee Press, 2000.**POINT DISTRIBUTION:**

Graded Homework and Active Learning Exercises.....	15 %
Lab Reports.....	25 %
Exams	40 %
<u>Final Exam</u>	20 %
Total	100 %
Portfolio (extra credit)	2 %

FIXED GRADING SCALE: Final course grade (CG) ranges are:

CG \geq 90 %	A	78 % > CG \geq 70 %.....	C
90 % > CG \geq 88 %.....	B+	70 % > CG \geq 68 %.....	D+
88 % > CG \geq 80 %.....	B	68 % > CG \geq 60 %.....	D
80 % > CG \geq 78 %.....	C+	60 % > CG	F

Availability of Prof.

You are welcome to stop by my office or send me e-mail if you have questions. My door is most always open but if it's closed, knock loud and give me a few seconds before walking away. I prefer that you don't stop by the thirty minutes before a scheduled class.

Some office hours are listed on my door and I am frequently there other times unless I'm out riding my bike. If you can't come then or find me, make an appointment with me.

The Texts & Lap Top Computers

Each student is responsible for having a copy of the current text for homework and each exam. These texts will be helpful references in the future. I would buy them and keep them.

Course lab experiences employ Matlab and on-line reporting, hence laptop use is mandatory. You should have Matlab installed prior to class. Your own lap top computer can not be used during exams.

Development vs. Evaluation Activities

The activities you do in this class fall into one of two categories. Some help you develop your knowledge, understanding or skills. The others evaluate the level of your knowledge, understanding or skills.

Graded Homework, Active Learning Exercises (ALEs), and the optional Portfolio are development tools. Because repetition and repair help in this development, each student has the opportunity to receive 100% for that portion of their grade by resubmitting corrected work.

The portfolio provides an opportunity for *extra credit*.

The Exams (including final) evaluate the level of your knowledge, understanding or skills. As a consequence, they evaluate the success of your development activities. THEREFORE, NO ONE WITH A FAILING EXAM AVERAGE WILL PASS THE CLASS REGARDLESS OF THE SCORE RECEIVED ON THEIR DEVELOPMENT ACTIVITIES.

Homework

Each problem solution of a **graded homework** will receive an evaluation of “OK” (ACCEPTED), “RE-DO” (PARTIALLY ACCEPTED), or “NO” (UNACCEPTED) using correctness, coherence and format as criteria. I will indicate why work is UNACCEPTED. (See HOMEWORK GUIDELINES handout for format and other details.)

A solution may be **resubmitted** in corrected form. Each resubmittal must be stapled IN FRONT of all previous submittals of that problem. Resubmittals for **full credit** are due by the class meeting after the hourly exam on that subject matter. After that, a maximum of three-quarters credit can be received. The final opportunity for resubmittal is with your portfolio. (PARTIALLY ACCEPTED work receives half credit.)

Active Learning

Learning is not a passive process. You are actively constructing your own knowledge so that you can use it. In-class **active learning exercises (ALEs)** will be used to facilitate this process. During these exercises you will work on a problem and I will be available to give hints. The solution will be discussed afterward. Sometimes you will be working by yourself; typically you will work in pairs. Some ALEs will be discovery; others review. The emphasis is on effort.

Some of these **active learning exercises** will be evaluated “OK”, “REDO” or “NO” (as HW). Resubmittals of these exercises may or may not be accepted depending on the exercise. Absence from class has a cost here.

Grading Errors on Exams

If you feel I have made a mistake grading your exam (e.g., sometimes I add points incorrectly), submit your exam with a *written* explanation of the mistake. Corrections will then be made as appropriate. NOTE: To be as consistent as possible, I have a score key. I will not change the amount I take off for a particular error.

Final Exam

The Final Exam will be **comprehensive** and somewhat harder than the in-class exams but more time will be given to reduce rush and stress. Every student is expected to take the final exam during the Final Exam Period scheduled by the Registrar.

Portfolio

Students will be able to submit a **portfolio** during the final exam for extra credit. The portfolio is a notebook containing class notes, handouts, homework solutions, exams, etc., in an organized fashion. Good portfolios are powerful study aids and present strong evidence of individual effort in studying the course material.

THIS CREDIT CANNOT BE USED TO MAKE A STUDENT PASS THE COURSE.

Absence

Absence can affect your grade. ALEs performed in your absence can not be replaced. Each absentee is responsible for obtaining notes and assignments from other students in class.

Academic Misconduct

It should go without saying, that any act of **academic misconduct** is grounds for cancellation of this grade covenant and discipline according to the most recent update of the Rose-Hulman Institute of Technology's Academic Rules and Procedures. (See the Registrar's web page.)

Any collaboration on exams is academic misconduct. Graded homework solutions are to be your own work. There is a big difference between getting a hint and copying. You ought to be able to work through a problem by yourself after you have received any hints. In a similar way, team work should be the team's work. If a teammate takes credit without helping, that is misconduct.