

Instructor: Professor Emeritus German R. Gurfinkel, Ph.D., F. ASCE, M. ACI, S.E.
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Newmark 2129D

Class Meeting: Monday and Wednesday 2-3:20 PM

Course Objectives:

1. Calculate prestress losses and the stresses in prestressed members
2. Analyze prestressed slabs, beams, and columns
3. Design prestressed reinforcement for slabs, beams, and columns

Class Protocol:

1. Students must attend every class. Only absences caused by health, family, or medical-related reasons are justified. Parental justification or family affairs, or a medical letter will be required. Students who are absent more than 3 times will be reported to the Associate Head of the Department and the final letter grade will be reduced by one letter grade.
2. Class participation will be actively sought by the professor at all times, as individual students are asked questions and calculations are checked by all.
3. Cell phones and other devices must be silenced during class and turned off for exams. These devices may not make an appearance of any kind during class or exams. Disregarding this request will result in the owner of the device being asked to leave the classroom, not to return until the next class.
4. Homework assignments are due at the beginning of the class and will be collected by the grader. The aggregate of **homework assignments constitutes 20% of the final grade.**
5. A midterm exam, open-book style, will be given during a class period halfway into the semester. **It will contribute 30% of the final grade.**
6. A comprehensive final exam, open-book style, will be given on the date indicated in the university calendar. **It will be worth 50% of the final grade. To pass this course, the final exam grade must be >60%.**
7. There will be no “conflict” for either the midterm or the final exam, unless extenuating circumstances for a given student apply that would justify an exception. **Online students will coordinate with Prof. Henschen to arrange for the remote exams.**
8. Students are required to write LEGIBLE LARGE scripts using soft black-lead pencils for both the homework and exams in this course. Students are required to use engineering paper for their homework, using only one side of the paper. Neat calculations and drawings are expected. Failure to comply with the above requests will result in up to a 20% penalty imposed on the homework and/or exam grades.
9. In case the professor has to be absent, there will be no class. Each 80 minute period will be recovered in consecutive classes, which will either start one-half hour earlier or continue for one-half hour later than regularly scheduled. Students will be notified by email, when possible of any such event. No absence by the professor is foreseen at this time.
10. Prof. Henschen will hold regular office hours, determined by student feedback. Students are encouraged to reach out to Prof. Henschen with any questions or concerns.

Grading:

93-100	A	73-77	C
90-93	A-	70-73	C-
87-90	B+	67-70	D+
83-87	B	63-67	D
80-83	B-	60-63	D-
77-80	C+	<60	F

Homework:

1. Late homework assignments will not be accepted
2. All calculations must be properly documented. Undocumented calculations will not be accepted for credit. All graphs and tables must be clearly labeled. Programs such as Excel or equivalent programs may be used for calculations; however, at least ONE sample calculation MUST be shown. If iterations are required for the solution to a problem, at least TWO sample trials/hand calculations MUST be shown. Homework submittals that do not meet these requirements may receive partial credit. All results must show units, unless dimensionless. Results are limited to 4 significant figures. Violations will be penalized.
3. Final answers MUST be noticeably framed (boxed, underlined etc)
4. All homework assignment submittals should reflect your own original work and thoughts. Submitting another student's work or ideas for credit is plagiarism and will be dealt with according to the Student Code.
5. Each new problem, within each homework must start on a new page.
6. Write LEGIBLE LARGE script. Use pencil for completing your homework assignments. Your UIN should be on all of the submittals in this class. Up to a 20% penalty on the homework grade will be applied otherwise. This also applies to the midterm and final exams.
7. Use of engineering paper is required. Write only on ONE side of the paper
8. Graded homework assignments are returned in class. Students are responsible to collect their graded homework assignments in a timely manner. You cannot collect some else's graded homework assignments under any circumstances; violations from this request will be reported to the office of the CEE Associate Head.
9. Homework regrade requests must be submitted within 7 days after graded homework assignments are returned in class. After this period, regrade requests will not be accepted.

Academic Integrity:

Academic integrity is expected; it is the responsibility of the student to refrain from such infractions as cheating, fabrication, and plagiarism in *any* aspect of the course. The definitions of, and university policies on, academic integrity are explained in Article 1, Part 4 of the Illinois student code (<http://admin.illinois.edu/policy/code/>). Any assignment where plagiarism or other forms of cheating has been determined to occur will receive a score of zero. Any student who has been determined to plagiarize, cheat or fabricate more than once in this class during the course of the semester will receive a failing grade for the

course. All questions of academic integrity will be handled through the established college of engineering procedure (FAIR system), which follows the student code. Please note the Illinois CEE honor code pledge: *I pledge to uphold the highest levels of professional and personal integrity in all of my actions, including 1) never assisting or receiving unfair assistance during exams, 2) never assisting or receiving assistance on class assignments beyond that specified by an instructor, and 3) always fully contributing to group activities that are part of a course activity.*

Access and Accommodations:

Be sure to work with Disability Resources and Education Services (<https://www.disability.illinois.edu/>) if you need accommodations. Please be ready to work with the instructor so they can be prepared to meet your needs. Transcription of the lectures will be run in Zoom by default, but if there are questions additional transcription services will be made available.

With all of the challenges students face, maintaining mental health is just as important as your physical health. If you find yourself struggling, please reach out to the University Counseling Center (<http://www.counselingcenter.illinois.edu/>), and they can coordinate with the instructor in necessary. For physical health issues, please communicate with the instructor so that they know how best to support you.