

INSTRUCTOR: Thomas Sputo, Ph.D., P.E.
Lecturer of Structural Engineering and Owner, Sputo Engineering
Campus Office: Weil 480B 392-9537 x 1496
Consulting Office: Phone: 378-0448 Fax: 373-1331
E-mail: sputo@ufl.edu

TEACHING ASSISTANT: Jenny Turner Weil 465 hyper2@ufl.edu

OBJECTIVE: Introduction to the basics of structural design in reinforced concrete using current design codes. Students are expected to become proficient in this basic knowledge.

TIME: Tu, Th 2nd and 3rd Periods MAEA Room 303

TEXTS : McCormac and Nelson, *Design of Reinforced Concrete*, 6th Edition, Wiley, 2005
ISBN: 0471487368 (New edition)

ACI 318-02, *Building Code Requirements for Structural Concrete*, American Concrete Institute, 2002 (Available for purchase thru instructor during first week of class - approximately \$58.00)

Class Notes and Supplemental Material (Available for purchase through ASCE)

WEB PAGES: <http://plaza.ufl.edu/sputo> For homework and quiz solutions
<http://www.mindspring.com/~sputoeng/default.htm> Sputo's general web page

GRADING CRITERIA:

(12) One-Hour Quizzes	80%
Recitation Problems	05%
Homework	10%
Attendance	05%

MAXIMUM GRADING SCALE: (May be relaxed at the option of the instructor)

93 - 100	A
90 - 92.99	B+
85 - 89.99	B
83 - 84.99	C+
77 - 82.99	C
75 - 76.99	D+
70 - 74.99	D
00 - 69.99	E

RULES FOR BETTER LIVING:

1. Attendance at lecture is mandatory and timeliness is important. Attendance will be taken at the beginning of class. Attendance grade will be based on the percentage of class sessions attended. For basis of computing grades, there will be no "excused absences".
2. Each lesson requires preparation by the student prior to the lecture. ACI 318 and textbook are required for all lectures.

3. Quiz Information: Quizzes are closed textbook, closed note. You are allowed to have your copy of ACI 318, a calculator, and a copy of the “Class Equation Sheet” with any supplemental information that you write on it yourself. The “Class Equation Sheet” must be turned in with your quiz, and will not be returned.
4. Homework will be assigned each class meeting. Working with fellow students on homework will be allowed as “self-help”, but the final homework which is turned in must represent the work of the individual student. Do not copy another student’s work. Homework will be compared and violations will be dealt with. Assigned homework will be due the following class meeting date, at the beginning of the 3rd period class meeting. **Late homework may be turned in no later than the start of the next class meeting after the due date with a 25% penalty.** Homework not turned in by that date will not be accepted
 - a. Homework will be submitted on engineering computation paper or as computer output (**DO NOT RE-USE PAPER!**) **ONLY ONE PROBLEM PER SHEET**. Number and label all pages. **Work neatly. All work will be graded on the basis of content and neatness. Use straightedges**, reasonable scales, use pencil (that means also using an eraser), and print and label clearly. Reference equations to ACI 318 (i.e.: ACI Eqn. 10-2). List assumptions or rationale for your work. **Sloppy or difficult to follow work will be returned ungraded. No exceptions.**
5. In-Class problems (recitations) will be assigned during the semester. These problems will have points assigned on a 3-2-1-0 basis, based on level of effort and completeness. Problems will not be graded. Solutions will be posted to the class web site.
6. The lowest of the 12 quiz grades will be dropped for purposes of computing final grades. Unless excused as noted in Item 7 below, students must take all 12 quizzes (ie: A grade of zero for a missed quiz will not be dropped, the next lowest grade will be dropped.)
7. No make-up work or quizzes will be allowed, except in cases of emergencies or civic responsibilities (jury duty, etc.), provided that the instructor is notified by e-mail in advance. Provisions for make-up work will be determined on a case-by-case basis. The decision of the instructor is final.
8. Some class communication will be by means of e-mail. Check your e-mail regularly (at least daily). Keep the instructor informed of any changes to your e-mail address. Failure on the part of the student to keep-up with e-mail communications is not excusable.
9. Solutions will be posted to the class web site for a period of 2 weeks after the due date, at which time they will be removed.

IMPORTANT UNIVERSITY INFORMATION:

Academic Honesty:

All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a student at the University of Florida and to be honest in all work submitted and exams taken in this class and all others.

Accommodations for Students with Disabilities:

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

TENTATIVE LECTURE SCHEDULE
(Subject to modification)

Class No.	Date	Topic	Text	HW	HW Due
1	24 Aug	Introduction			
2		Introduction			
3	26 Aug	Design Methods	Chapter 1; 4.1	4.1, 4.2, 4.4(a)(b)	31 Aug
4		Material Properties	Chapter 1		
5	31 Aug	Analysis under Service Loads	Chapter 2	2.1, 2.2, 2.3	02 Sept
6		Analysis under Service Loads	Chapter 2		
7	02 Sept	Flexure - Strength Design	2.4; Chapter 3	2.8, 2.9, 2.12 (Calc Itr only)	07 Sept
8		Recitation			
9	07 Sept	Flexure - Strength Design	Chapter 3	2.26, 2.28, 2.32	09 Sept
10		Quiz 1			
11	09 Sept	Singly Reinforced Rectangular Section - Analysis	Chapter 3	3.7	14 Sept
12		Recitation			
13	14 Sept	Singly Reinforced Rectangular Section - Analysis	Chapter 3	3.8, 3.9	16 Sept
14		Quiz 2			
15	16 Sept	Singly Reinforced Rectangular Section - Design	4.2 - 4.3	4.6, 4.8	21 Sept
16		Recitation			
17	21 Sept	One Way Slabs	4.7	4.25, 4.33	23 Sept
18		Quiz 3			
19	23 Sept	One Way Slabs - Temperature Steel	4.7	4.26	28 Sept
20		Recitation			
21	28 Sept	T-Beam Sections	5.1 - 5.4	5.5, 5.6	30 Sept
22		Quiz 4			

Class No.	Date	Topic	Text	HW	HW Due
23	30 Sept	T-Beam Sections	5.1 - 5.4	5.18, 5.22, 5.40	5 Oct
24		Recitation			
25	5 Oct	Doubly Reinforced Rectangular Sections	5.7 - 5.8	5.26, 5.27	7 Oct
26		Quiz 5			
27	7 Oct	Doubly Reinforced Rectangular Sections	5.7 - 5.8	5.33, 5.44	12 Oct
28		Recitation			
29	12 Oct	Serviceability: Deflections	6.1 - 6.8	6.5, 6.11	14 Oct
30		Quiz 6			
31	14 Oct	Serviceability: Cracking	6.9 - 6.12	6.15, 6.20 (Calculate maximum spacing only)	19 Oct
32		Recitation			
33	19 Oct	Bond and Anchorage	7.2	NONE YAY!	
34		Quiz 7			
35	21 Oct	Development Length, Standard Hooks	7.3; 7.5; 7.7; 7.8	7.6, 7.7, 7.21	26 Oct
36		Recitation			
37	26 Oct	Bar Splices	7.12 - 7.14; 7.16	7.26, 7.35, 7.30	28 Oct
38		Quiz 8			
39	28 Oct	Shear	8.1 - 8.7	8.5, 8.6	2 Nov
40		Recitation			
41	2 Nov	Shear	8.8 - 8.11	8.7, 8.9	4 Nov
42		Shear	8.8 - 8.11		
43	4 Nov	Quiz 9		8.8	9 Nov
44		Recitation			

Class No.	Date	Topic	Text	HW	HW Due
45	9 Nov	Short Columns	9.1 - 9.7	9.5, 9.6, 9.8, 9.19	16 Nov
46		Short Columns	9.9; 9.11		
	11 Nov	No Class - Veterans Day			
47	16 Nov	Short Columns	10.1; 10.3 - 10.6; 10.10	9.9, 10.3	18 Nov
48		Quiz 10			
49	18 Nov	Short Columns	10.1; 10.3 - 10.6; 10.10	10.4, 10.7	23 Nov
50		Recitation			
51	23 Nov	Short Columns	10.1; 10.3 - 10.6; 10.10	10.12, 10.14, 10.24	30 Nov
52		Quiz 11			
	25 Nov	No Class - Gobble, Gobble			
53	30 Nov	Footings (Square)	12.1 - 12.4; 12.6	12.8	2 Dec
54		Recitation			
55	2 Dec	Footings (Wall)	12.5	12.2, 12.28	7 Dec
56		Footings (Rectangular)	12.9		
57	7 Dec	Quiz 12			
58		Instructor Evaluation			

This short paper by Professor Yao from Texas Tech is a pretty good summary of my thoughts and philosophy on grades. I could not have said it better than this.

Sputo

ON GRADES AND GRADING

by James T. P. Yao for his students and interested colleagues

The grade in a given course is a measure of the student's performance in that endeavor. The overall grade point averages are indeed important considerations for all students. When I was a student at the University of Illinois in Urbana-Champaign, I did care about my grades at that time. However, I never complained about any of my grades though, at times, I felt that the grade I received in a particular course might not be fair. The fact is, on the average, the overall grade point average did reflect the knowledge gained and the effort that I put into my college education. There were courses for which I thought that I deserved a better grade than the one on my record. On the other hand, I also had grades that were better than what I expected and/or deserved. In the long run, they all averaged out at the end of my college career. Most importantly, I learned from each professor and from each course that I had.

A few years after I graduated, I forgot all my grades. No one has ever asked for my grades just a few years after I graduated from college. To date, however, I have kept all the basic knowledge that I gained from my college education. Especially, the method of learning new things on my own has been useful. If the students aim at learning as much as they can from each course and each professor, the good grades will come as a result of their diligent work, on the average. On the other hand, if the students waste their time arguing about their grades, they will lose time for studying new lessons and thus hurt their future grades.

As a teacher, I try very hard to be fair and consistent in grading student papers. The student will get a perfect score if he/she gives a correct answer. If the answer is not correct, the teacher is the one who judges how serious the error is and assigns a partial score accordingly. As a student, I had several professors who did not give partial scores. The reason was that, the engineering system could fail with the wrong answer, no matter how close the answer is to the correct one (e.g., exactly the same number but with a wrong sign). I do not agree with that policy but respect their judgement in those courses. In any event, partial scores are subjective depending on the experience and viewpoints of the individual teachers. It is counter-productive to argue about it.

Please be careful in doing your homework, tests, and other assignments. People's lives and properties will depend on your work someday in the near future. Try to learn as much as you can while you are in school. Communicate with your teachers and classmates frequently, and concentrate on the learning process. With knowledge, you will become a successful and proud engineer soon. **HAVE KNOWLEDGE, WILL SUCCEED!**