

MATH:2560:0081/0091 Engineer Math IV: Differential Equations Equatns

Fall 2017

4:30P - 5:20P MWF 218 MLH

5:30P - 6:20P MWF 110 MLH

Instructor: [Dr. Isabel K. Darcy](#)

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TENTATIVE Office hours:

M 2:00 - 3:20pm, WF 3:30 - 4:15pm in MLH B1H (my office)

MWF 6:20 - 6:25pm+ in MLH 110 or B1H* and by appointment.

Note: + means I will be also available directly after the office hour, normally for as long as needed.

*Depending on room availability, I will hold evening office hours in MLH 110 or in the basement MLH B1H.

[Engineering Tutorial Center](#)

[Syllabus](#)

Note: Attendance/class participation may count for up to 2% of your grade. For excused absences, please send me a short e-mail describing how you learned the material covered the day you were absent (e.g. online video, read book, tutorial center, friends, met with me, etc.). If you miss a quiz or exam, you must also contact me BEFORE the missed quiz/exam. HW may be turned in early (put in my mailbox or slide under my office door, B1H MLH). You should, of course, only miss class for a valid reason. Note: I will not take attendance the first week of class or on our exam days.

TENTATIVE CLASS SCHEDULE-ALL DATES SUBJECT TO CHANGE (click on date/section for pdf file of corresponding class material):

	Monday	Wednesday	Friday	HW/Announcements
Week 1 notes	8/21: 1.1	8/23: ch 1, 2.2(ppt, pdf), WA, ch 1 and 2	8/25: ch1, 2.2	
Week 2 notes	8/28: 2.1, int by parts	8/30: 2.1 - 2.3, partial fractions	9/1: 2.3, 2.4 quiz 1: cumulative form A, answers, form B, answers	HW 1 (due Monday 8/29) 1.1. 1, 4, 6, 11, 13, 15, 17, 19, 21. 1.2. 1(a), 2(a), 4, 8, 14. 1.3. 2, 6, 7, 10, 12, 17.

Week 3	9/4: Holiday	9/6: 2.4 , p. 134, 5 ex, IVP ex, Ex 2.4.1	9/8: ch 1, 2.1 - 2.5	HW 2 (due Wednesday 9/6) 2.1. 5, 9, 15, 17, 19, 30, 33. 2.2. 4, 7, 9, 18, 33. 2.3. 2, 8, 11, 13 16.
Week 4	9/11: 2.7, notes ,	9/13: 2.7	9/15: 2.8 NEW, FYI: maple code , quiz 2: word problems: 1.1, 1.2, 2.3, 2.5 , answers	HW 3 (due Monday 9/11) 2.4. 2, 6, 8, 13, 21, 23, 25, 27, 28. 2.5. 4, 5, 10, 15, 18.
Week 5	9/18: linear fns, 3.1, 3.3, 3.4	9/20: 3 2	9/22: 3.1- 3.4, 3.3, exam review	HW 4 (due Monday 9/18) 2.7. 2, 3, 12(a)(b). 2.8. 3, 6.
Week 6	9/25: 3.1-3.4, Review quiz 3 (form A, form B): cumulative ANSWERS: form A, form B	9/27: Review Exam 1, Ch 1, ch 2, and 3.1 6:30PM - 8:00PM in W 128 CB	9/29: Matrix eqn, 3.5	HW 5 (due Monday 9/25) 3.1: 1, 3, 5, 9, 11, 12, 15, 17, 21.
Week 7	10/2: 3.5	10/4: 3.5, worksheet, answers ,	10/6: 3.6, 3.7	HW 6 (due Monday 10/2) 3.2: 3, 5, 9, 13, 14, 15, 16, 17, 21, 24, 25, 29, 30. 3.3: 1, 3, 9, 12, 17, 18, 19, 22. 3.4. 2, 5, 6, 12, 14.
Week 8	10/9: 3.7, 3.8	10/11: 3.8, maple ,	10/13: (FYI 3.8), resonance, 4.1 ,	HW 7 (due Monday 10/9) 3.5. 1, 4, 9, 13, 15, 18, 19. 3.6: 1, 3, 7, 10, 17, 29.
Week 9	10/16: 4.1, quiz 4 (form A, form B): ch 3 ANSWERS: form A, form B	10/18: 4.1, 4.2, 4.3	10/20: 3.6, 4.4, notes	HW 8 (due Monday 10/16) 3.7: 1, 3, 7, 11, 12, 17. 3.8: 1, 4, 5, 7, 9, 11. 4.1: 11.
Week 10	10/23: 6.1	10/25: 6.1, 6.2, spring	10/27: 6.3, notes, 6.3 answers, Review	HW 9 (due Monday 10/23) 4.1: 1, 3, 4, 7, 9, 16, 18, 19bc, 21, 23. 4.2: 1, 4, 7, 11, 12, 13, 15, 18, 29, 32. 4.3: 1, 3, 6, 8, 9, 14.
Week 11	10/30: Review 6.2, 6.3, 6.3 answers, resonance, 3.8, quiz 5, answers	11/1: Review, Exam 2: Ch 3, ch 4, 6.1 6:30PM - 8:00PM W 128 CB	11/3: 6.4	HW 10 (due by 4pm Friday 11/3) 4.4: 2, 4, 5. 6.1: 2, 3, 5, 7, 11, 14, 16, 15, 23, 24. 6.2: 2, 4, 10, 11. and 6.3: 1
Week 12	11/6: 6.5 ,	11/8: 6.6	11/10: 7.1 7.3, E.V., E.V. 2 quiz 6: 6.1 - 6.5, 7.2, 7.3	HW 11 (due Monday 11/6) 6.2: 13, 15, 16, 17, 23, 26.

				6.3: 5, 9, 11, 13, 15, 17, 20, 21, 24, 25, 26. Strongly recommended, but not HW: 7.2: 4. 7.3: 15, 16, 17.
<u>Week 13</u>	11/13: 7.4 resonance	11/15 : 7.5, 7.5 , 9.1 7.6 , ch7 , 9.1	11/17: 7.6 , ch 7 and 9 , maple , 9.1 , maple , solve , streamplot (wolfram alpha) ,	HW 12 (due Monday 11/13) 6.4: 2, 5, 9, 11. 6.5: 1, 3, 6, 8. 7.1 (use matrix form): 1, 4, 5, 7, 11.
*****Thanksgiving Break*****				
<u>Week 14</u>	11/27: 6.6 , 7.7	11/29 : 9.1-9.3	12/1 : 9.2 , 9.3 quiz 7	HW 13 (due Monday 11/27) 7.1: 15. 7.4: 4, 6. 7.5: 2, 5, 12, 15. 7.6: 1, 2, 6, 9. 9.1: 20, 21.
<u>Week 15</u>	12/4: Review: Ch 3, 4, 6	12/6 : Review: Ch 1, 2, 7, 9	12/8 : Review	HW 14 (due Monday 12/4) 6.6: 4, 6, 8, 9, 10, 13, 14, 15, 17. 7.7: 2, 6. 9.1: 2, 13, 20, 21. 9.2: 1, 3. 9.3: 2, 4.
Final Exam: Wed 12/13/2017 3:00PM - 5:00PM, Location AUD MH				

http://homepage.divms.uiowa.edu/~idarcy/COURSES/34/FALL10/quiz2sum.pdf http://homepage.divms.uiowa.edu/~idarcy/COURSES/34/dfield2.mw [Review](#), [theorems](#)

[9.1 maple](#) [9.1](#), [maple](#), http://homepage.divms.uiowa.edu/~idarcy/COURSES/34/FALL10/thm.pdf

[applet??](#), [applet 2.3](#) [2.3 #22](#), [2.4ex](#) [df](#)