MATH114: ANALYTIC GEOMETRY AND CALCULUS II

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Textbook: *Thomas' Calculus, Early Transcendentals,* 11^{th} *edition, Addison-Wesley, 2006.*

The Course: We will cover most of the sections in Chapters 6,7,8 and 11 — see the homework questions on the next page.

Recitations: The TA for the class is Andrew Samuelson. Check which recitation class you have been assigned to. His Office Hours will be Tuesday, Thursday 1.00–3.00.

The homework questions for the semester are on the next page. These will not be collected or graded but you are STRONGLY advised to attempt them and write out your solutions as if they would be. You are encouraged to discuss these problems amongst yourselves and to make use of the office hours. The TA will go through each set of homework questions in the next recitation class and you will only benefit from this if you have attempted them properly beforehand. Note that the above list of homework questions is the ABSOLUTE MINIMUM you should be doing each week. All of the odd-numbered questions in the book have solutions in the back and you should attempt as many of those as you feel you need to.

The course will be evaluated with 4 (1 hour) in-class exams on Tuesday September 16th, Tuesday October 7th, Thursday November 6th and Tuesday December 2nd. Your 3 best results (relative to the class average for that test) will each contribute 20% towards the evaluation and the remaining 40% will come from a (cumulative) final exam on Tuesday December 9th. I shall explain the grading system in more detail in the first lecture [1]. If you miss more than one of the in-class exams then you will need to provide very good (and well-documented) reasons for missing EACH of them. There will be no make-up tests or 'extra-credit' assignments. You are expected to abide by the University Honor Code and all suspected violations will be reported to the Honor Committee. No outside materials will be allowed during any of the examinations.

Attending the recitation classes is *extremely important.* I will not require attendance to start with, but if the numbers fall below acceptable levels then the TA will take attendance records and absenteeism will be penalised. Finally, it is YOUR responsibility to regularly check the course webpage and your official university email address for announcements.

Additional Remarks:
1) Feel free to ask questions in class. It makes things more interesting for everyone, myself included.
2) There is help available for this course at the Math Tutoring Centre.
3) Please check the course webpage or this handout for the answers to any questions you may have before emailing me.

[1] NOTE: I DO NOT GRADE ON A CURVE. The formula I use to rank you depends upon the class average but the grade boundaries are determined by absolute, not relative, performance!

Chapter	Section	Homework Questions (odd numbers only)
Chapter 6	Applications of definite integrals	
	6.1	1–5,19–25,33,47–51,55–59
	6.2	3–7,13,17,19,23–27
	6.3	1–5,9–15,27–33
	6.5	9,13,17,21
Chapter 7	Integrals and transcendental functions	
	7.1	1–11,23,27,33,43,47,49,53,55
	7.2	1–9,13
	7.4	1,5,9,11,17,21,29,35,37,43,59,61,73,77
Chapter 8	Techniques of integration	
	8.1	3–13,19–29,39–47,51–55,67,69
	8.2	5,9–13,23–29,39,41
	8.3	1,5,9,17,21,23,25,29,33,35,37,45
	8.4	1–7,15,19,25,29,37
	8.5	5,11,15,19,23,27,31,35
	8.6	1,5,9,23,29,31,35,39,49
	8.7	1,5
	8.8	1–13,21–25,41,45,49,51,53
Chapter 10	Polar Coordinates	
	10.5	1–7,11–33,49–55
Chapter 11	Infinite sequences and series	
	11.1	1,7,9,13–41,55–59,73,81,97–103
	11.2	1–9,15,19,25–31,41,45,51,57,71,73
	11.3	1–11,17,31
	11.4	5–29
	11.5	5–21,39,43
	11.6	5–21,33,37,39,45,47
	11.7	1–15,33,37
	11.8	5–15,23–27
	11.9	3–11,49
	11.10	1–9