Math 244, Summer 2017

Instructor Matt Hohertz E-mail address matt.hohertz@rutgers.edu Office hours WF 3:45-5PM, Hill Center 622 Section F6 Meeting dates June 26 - August 16, 2017 Meeting times MWF 6:00-8:45PM

Textbook Boyce and Diprima, Elementary Differential Equations, 10th edition. (ISBN:9781119917748)

Prerequisites Calculus I-III.

Course objectives This course is designed to familiarize you with basic tools for solving differential equations.

Academic Integrity Policy

All students in the course are expected to be familiar with and abide by the academic integrity policy (http://academicintegrity.rutgers.edu/academic-integrity-at-rutgers). Violations of the policy are taken very seriously.

Disability Policy

Students with disabilities requesting accommodations must present a Letter of Accommodations to me as early in the term as possible (see https://ods.rutgers.edu/my-accommodations/letter-of-accommodations).

				Sections
Week I	Monday	June 26		1.1, 1.2, 1.3
	Wednesday	June 28		2.1
	Friday	June 30		2.2
П	Monday	July 3		2.4, 2.8
	Wednesday	July 5		2.5, 2.6
	Friday	July 7	Mini-exam: thru 2.6	2.7, 8.1
Ш	Monday	July 10		2.9, 8.2, 8.3
	Wednesday	July 12		3.1, 3.2
	Friday	July 14		3.3, 3.4
IV	Monday	July 17		3.5, 3.6
	Wednesday	July 19		3.7, 3.8
	Friday	July 21	EXAM I: Thru 3.6	7.1
V	Monday	July 24		7.2, 7.3
	Wednesday	July 26		7.4
	Friday	July 28		7.7, 7.9
VI	Monday	July 31		7.5, 7.6
	Wednesday	August 2		7.8
	Friday	August 4		9.1
VII	Monday	August 7	EXAM II: Thru 7.8	9.2, 9.3
	Wednesday	August 9		9.4, 9.5
	Friday	August 11		9.7
VIII	Monday	August 14		9.8
	Wednesday	August 16	FINAL	COMPREHENSIVE EXAM

Tentative lecture schedule

Readings/homework

For best results you should read the excerpts assigned for a lecture before the start of the lecture – and come to the lecture with questions.

While homework will not be collected for a grade, it is not optional – practicing the skills you learn in readings and lecture is an essential part of learning the material. I am happy to discuss homework problems in office hours and, subject to time constraints, return them for feedback.

NOTE. The above schedule is tentative; changes announced in class or

through Sakai will supersede the above schedule in determining your responsibilities.

Maple labs There will be three Maple labs; they must be submitted in paper format and will not be accepted late.

Daily grades

We will have 8-16 quizzes over the course of the semester (i.e., 1-2 per week), two of which will be dropped in calculating your grade. Unless otherwise specified in advance, material corresponding to a given section of the book can be tested starting on the lecture when the homework for that section is due.

I may also assign additional "workshop" problems to be written up.

NOTE. To encourage regular class attendance, I will generally not announce quizzes in advance and reserve the right to give them at any point in the class period.

Midterms and the final

Except as expressly stated otherwise, exams

- may test any material covered before the day of the exam
- will be closed-book and -notes
- will be given in the same place and time as class meetings
- will be 80 minutes long (three hours for the final and 45 minutes for the mini-exam)
- will be given at the beginning of class periods

I will publish a key and rough rubric of each exam and quiz after it is over. Please note that I will be lecturing for the rest of the period after I collect the midterms and mini-exam! The final exam will take place on the last day of class,

Wednesday, August 16, approx. 6:00 - 9:00pm.

Quiz and exam protocol

The final will be given in independent 90-minute sections, with a brief intermission to stretch and use the restroom; quizzes will usually be no longer than five or ten minutes long. Calculators, notes, and electronics may not be used during exams and quizzes.

You should write in a legible hand that flows generally top-to-bottom and then left-to-right, with separating borders, labels, etc., as needed for readability. While you generally need not write in complete sentences, keep in mind that I cannot consult you as I grade your exam paper.

In the interest of fairness to your fellow students and me, please do the following before each exam and quiz:

- use the restroom as necessary
- silence cell phones
- put textbooks, notes, and notebooks completely out of sight
- put bags, backpacks, and purses at the front of the room

You are also kindly asked to refrain from:

- wearing baseball caps
- starting the exam early or continuing to write after time is called
- doing anything that *gives the appearance* of cheating (e.g., hand-signalling, looking in unusual directions)

Grading

Make-ups There will be no make-up quizzes or midterms; missed quizzes (under any circumstances) and missed exams (under most circumstances) will receive scores of zero.

If an **extraordinarily serious matter** causes you to **unavoidably** miss a midterm then I *may consider* allowing you to bypass the exam and scaling your other grades to calculate your final grade. If you find yourself in such a predicament you must *immediately* notify me, and I will expect you to provide documentation of the situation as soon as reasonable. Requests on the basis of conflicts you could have foreseen when registering, or could have otherwise prevented, will be rejected.

Turnaround time As students, you deserve quick, regular feedback. Therefore, barring emergencies I will commit to having exams and quizzes returned to you within two class periods.

Appeals If you feel that I have made an error in grading your quiz or exam, please submit an appeal by 4:30pm a week after it was returned (*i.e.*, if it was returned in Friday's class then submit the appeal by next Friday by 4:30pm). In your appeal, you must cite *each specific instance* in which you wrongfully lost points (do not just write "Question 2") as well as the number of points you would like to be credited for each mistake.

In the interest of grading all students by the same standard, appeals on grounds other than simple grading errors (*i.e.*, you put the right answer and I marked it wrong) will generally not be granted.

Also, please be warned that the deadline for grade appeals shall be strictly enforced; no appeals submitted after the deadline will be considered. The pains of past experience force me to make NO EXCEPTIONS WHATSOEVER to this rule.

Weighting Your grade in this course will be determined by three midterms, a final exam, three Maple labs, and at least eight "daily grades," which will include quizzes and may include in-class workshops.

Your final grade will be determined as a weighted average of these grades in the following way:

Daily grades	25%
Maple labs	10%
Mini-exam	5%
Midterm I	15%
Midterm II	15%
Final Exam	30%

NOTE. If your final exam score is higher than one or more of your midterm scores then it will replace your lowest midterm score in the calculations above.

Final grades Letter grades will be determined only after final exams have been graded.

Contingency plan

We have a lot of material to cover in few lectures and so it is imperative that I miss lectures on the basis of true emergencies only. Please check your email and Sakai announcements frequently; if such an emergency arises I will inform you through those channels as soon as possible and give instructions on what to do. Most likely, the plan will be that you go to the usual classroom to be taught by a substitute instructor.

Here are two other possible scenarios and what to do in each case:

- The university cancels classes, or the building/classroom is inaccessible, or I cannot find a substitute instructor in time for the missed lecture. In this situation, I will post an announcement on Sakai explaining the situation, and you should plan to arrive on time as usual until you see it. Instead of an in-person class, we will hold an online class; I will post lecture notes and hold extra office hours in the following days.
- I am not present at the classroom, there is no announcement

on Sakai, and the department does not know where I am.² If there are no updates within 30 minutes of the start of class you may leave the classroom location. Please check Sakai frequently for updates and directions.

 $^{^2\}rm Obviously I$ will avoid this situation at all costs but want to include it in case there is an emergency in which I do not have access to communication.