Syllabus for Math 285 B1 (48595), Spring 2021

<u>Instructor:</u> Dr. Timur Oikhberg. *e-mail:* <u>oikhberg@illinois.edu</u>
When writing an email, please use your *illinois.edu* account.

Moodle page: https://learn.illinois.edu/course/view.php?id=56173 **Zoom office hours:** MW 8:05-8:50, Th 2-2:45, or by appointment.

Zoom tutoring: To be announced

<u>Campuswire:</u> https://campuswire.com/c/G46D083E3/feed Post your questions there; either the professor, one of the TAs, or one of the students will answer. Student participation is strongly encouraged.

<u>Text:</u> Boyce and DiPrima, Elementary Differential Equations and Boundary Value Problems, 10th Ed., 2012, Wiley. We will cover Chapters 1-4, 10, and parts of 11. Webassign shall be used for homeworks (a link will be provided on Moodle).

<u>Course description:</u> The "target audience" for this course are engineering majors, who require working knowledge of differential equations. We shall cover the physical meaning of differential equations, and basic techniques for solving them. Proofs will not be emphasized.

Credit: 3 hours. Credit is not given for both Math 285 and any of Math 284, 286, 441.

Prerequisites: MATH 241; MATH 347 or MATH 348, or equivalent courses.

<u>Course format:</u> This is an online class. Lessons (each covering a separate topic) will be periodically posted on Moodle. Each lessons will consists of several videos, a short quiz, and one or several Webassign homeworks. Short quizzes account for 5% of the total grade, homeworks – for 20%. Two weakest homework scores will be dropped by Webassign; two lowest quizzes will be dropped by Moodle.

<u>Midterms:</u> There will be three midterm exams: March 3, March 31, and April 28 (*Wednesdays*). The weakest midterm score will be worth 10% of the total grade, the other two - 20% each. Midterms will be administered online; each test will be open for at least 12 hours.

<u>Final</u>: The comprehensive final (worth **25%** of the course grade) will be on **Monday May 10.** Access to the test will be open for at least 12 hours. Once you start, you will have a 3 hour to complete the test. Final exam conflicts will be resolved following the guidelines set out in the Student Code (https://studentcode.illinois.edu/article3/part2/3-201/).

Exam and homework policies: All tests are "open notes, open book." However, collaboration is not permitted. Working together on homeworks is permitted; however, students are urged to understand the solution prior to submitting it.

Grade components: Short quizzes: 5%. Homeworks: 20%. Midterms: 2.5 x 20%. Final: 25%.

<u>Letter grades</u>: 85% guarantees an A, 75% - a B, 60% - a C, and 50% - a D. An upward "curve" may be given (depending on overall performance of the class, the level of difficulty of tests, and the distribution of scores), but this will not be decided until end of the semester.

Excused assignments and make-ups: To make up a test, or to have a homework excused, you need to present a valid reason for missing the assignment (such as an illness, a death or serious illness in the

family, a religious observance, or an out-of-town job interview). Travel and leisure plans, even for family events, are never a legitimate reason for missing an assignment.

Evidence of a valid reason for missing an assignment must be presented as soon as possible (if a conflict can be predicted in advance, let me know at least one week in advance). In case of religious observances, complete the form https://odos.illinois.edu/community-of-care/resources/students/religious-observances/

Further information

Academic deadlines: Information about academic deadlines, and about the class schedule, can be found at https://registrar.illinois.edu/academic-calendars/spring-academic-calendar-21/ or at https://senate.illinois.edu/ep/Props/1415/FINAL/EP15.08final.pdf. Some important dates:

- Deadline to drop the course without grade of W: Friday March 19.
- Last day of instruction: Wednesday May 5

Note that these are University-wide deadlines. Individual schools and departments may have more stringent sets of rules.

Students with disabilities who require special accommodations should contact me as soon as possible. I also encourage getting in touch with <u>Disability Resources and Education Services</u> (DRES). Please contact DRES at least one week prior to the exam by phone (217-333-4603) or by email (<u>disability@illinois.edu</u>).

Suggestions for success in the class:

- Please seek help if you are having trouble with something, and do so before it becomes an issue on a test. Do make use of tutoring, and of office hours.
- Use the Campuswire page to discuss problems with your classmates, or to ask instructors.
- While reading your text we strongly encourage you to work through the proofs and examples yourself on paper. This is a very useful way to increase your understanding of the material.
- After reading something, try to summarize the important concepts. This will help create a mental framework into which to fit the problems you will be working on.
- Anonymous feedback page will be set up on the Moodle website. Please use it to improve the class.
- If you work **actively** on the material with a pen in hand and scrap paper in front of you, and if you summarize **how** to solve problems and write down **questions** to yourself about what you do not understand, then you are likely to succeed in the course. We are here to help you learn good luck!