Instructor: Jindrich Zapletal. Office LIT456, e-mail <u>zapletal@ufl.edu</u>. Office hours MWF period 3: 9:35-10:25am at https://ufl.zoom.us/s/7401025557

General outline of the course. (MAP2302) We will cover chapters 1-7 in the textbook, even though some sections (such as 5.8) will be omitted.

The course is scheduled as 100% online. My office hours will be 100% online as well. There will be regular synchronous lectures MWF period 4: 10:40am-11:30am as well as some pre-recorded videos. I plan to run the synchronous lectures as more or less question and answer sessions, even though my plans will be probably adjusted during the term.

Grading. There will be three take-home exams, due on September 30 (Ch. 1, 2, 3), October 30 (Ch. 4,5,6), and December 14 (Ch. 7). There will also be a group presentation project. The exams are all equally weighted, and the project is worth half an exam. Attendance is worth half an exam. There is no other basis for the final grade. The final grade will be calculated from the total score using a straight curve.

Project. I expect everybody in the class to participate in one of the group presentation projects. Possible topics for these projects are outlined below. Each group will have 30-50 minutes to present their work. I set aside five periods for the presentations: Sep. 23, Sep. 25, Oct. 21, Oct. 23, Dec 7. There are eight presentations in total which means that each group should have at least three members and some should have four.

Projects for the first part: 2.C, 3.C and 3.D from the textbook, logistic and exponential population models with a single population.

Projects for the second part: 4.C, Kepler and relativistic equations for planet orbits, compartmental analysis of epidemics, Volterra—Lotka equations for competing populations

Projects for the third part: 7.B, the Gamma function

Attendance. The Zoom videoconferences allow the host to collect attendance data together with the time spent in the session. I will count you as having attended if you spent at least 30 minutes in the session. There are 40 zoom sessions scheduled, I will consider you having earned full attendance credit if you attend at least 25 of them. I will report on your attendance score twice during the term in the Grades section.

Textbook. Nagle, Saff, Snider: Fundamentals of Differential Equations and Boundary Value Problems, 7th ed. This is not the latest edition of the book. The editions do not differ too much from each other, but if you want to refer to a precise exercise number and such, you will need 7th edition.

Further administrative matters.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the <u>online catalog (Links to an external site.)</u>.

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available here (Links to an external site.).

Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via this link (Links to an external site.). Summaries of course evaluation results are available to students here (Links to an external site.).

Students with disabilities requesting accommodations should first register with the UF Disability Resource Center (352.392.8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodations. Students with disabilities should follow this procedure as early as possible in the semester.

The Mathematics Department is committed to diversity and inclusion of all students. We acknowledge, respect, and value the diverse nature, background and perspective of students and believe that it furthers academic achievements. It is our intent to present materials and activities that are respectful of diversity: race, color, creed, gender, gender identity, sexual orientation, age, religious status, national origin, ethnicity, disability, socioeconomic status, and any other distinguishing qualities.

The UF Religious Holidays Policy is available here. (Links to an external site.)

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code." On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (Links to an external site.) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Our class sessions may be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voice recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials by students or any other party is prohibited.