MATH 204: DIFFERENTIAL EQUATIONS
KOÇ UNIVERSITY, FALL 2020

General Information

Instructors, Offices and Office Hours:

Ali Serpengüzel,   Sci 119,   Tuesdays 18:00 - 19:00 or by appointment

Alphan Sennaroğlu,   Sci 157,   Tuesdays 13:30 -15:00 or by appointment

Varga Kalantarov,   Sci 162,   Thursdays , 17:30 -19:00 or by appoinment.

Homepage: http://home.ku.edu.tr/~vkalantarov/math204_fall20/
Textbook: W. E. Boyce, R. C. DiPrima and D. B. Meade, Elementary Differential Equations and Boundary Value Problems, Global Edition. .

Topics to be covered: Introduction to differential equations, First order ordinary differential equations (ODEs), Second and higher order ODEs, Power series solution of ODEs, The Laplace transform and applications, Systems of linear ODEs, Partial Differential equations and Fourier Series (PDEs).

Objective: To provide the student with a basic knowledge of ODEs and PDEs. This includes the general theory of and solution techniques for general first order ODEs, second order linear ODEs, systems of first order ODEs, Fourier series and initial boundary value problems for the heat and wave equations.

Homework: Suggested homework problems will be assigned regularly but not collected for grading. Students are required to solve these problems in order to gain a better understanding of the subject.

Evaluation method: Students' progress will be evaluated according to their performance in two midterm exams and the final exam which will cover all the material covered in this course. Each of the midterm exams will contribute as 30 % to the total grade while the final exam will have a 40 % weight.

Eligibility to take the Final Exam: Students will be permitted to take the final exam, only if the average of their midterm exam grades is 20 or higher.

Make-ups: There will be mskeup exams for each midterm and final examinations for those students with university approved valid excuse.

Rules for online education: The lectures will be pre-recorded and made available online as videos. The electronic files of these video lectures and their content must not be made

available to third parties; students are not permitted to share any part of these videos in the social media platforms or post them in the internet. The students are recommended take notes while watching the video lectures and send their feedback to the instructor's email. They can also make appointments for Skype meetings.

Suggested method of study: Reading the lecture notes and the books is necessary for grasping the subject, but it is by no means sufficient. Students must try to reproduce the definitions and proofs of the theorems, and apply the techniques to other problems.

Attendance and auditing students: Students are advised to attend all the lectures and problem sessions.

Academic dishonesty: If a student is caught cheating in an exam, s/he will be punished according to the YÖK regulations. These consist of one or two semesters of prohibition from attending the university.