## **Syllabus for Math 204**

Fall 2015

**Title of the Course:** Differential Equations

**Instructors:** 

Elvan Ceyhan, elceyhan@ku.edu.tr, SCI 268, Office Hours: Mon & Wed 13:00-14:00 or by appointment

Altan Erdoğan, alerdogan@ku.edu.tr, SCI 106, Office Hours: Tu & Th 13:00-14:00

**Teaching Assistants (TAs):** Çiğdem Ak (cak14@ku.edu.tr), Polat Charyyev (<u>pcharyyev@ku.edu.tr</u>) [office hours of TAs will be announced on the course website.]

**Web Address:** Assignments, answer keys, and updates about the course will be posted at the course website: http://home.ku.edu.tr/~math204

**Textbook:** W. E. Boyce and R. C. DiPrima, *Elementary Differential Equations and Boundary Value Problems*, 10<sup>th</sup> Edition (John Wiley & Sons, New York, 2012).

**Topics to be covered (tentative):** *From B & D*: Introduction to differential equations (Chapter 1); First order ordinary differential equations (ODEs) (Chapter 2); Second and higher order ODEs (Chapter 3); Power series solution of ODEs (Chapter 5); The Laplace transform (Chapters 6); Systems of linear ODEs (Chapter 7), Partial Differential Equations (Chapter 10 partial). In terms of Chapter/Section numbers the topics to be covered are 1.1-1.3, 2.1, 2.2, 2.4, 2.6, 3.1-3.6, 5.1-5.3, 6.1-6.4, 6.6, 7.4-7.9, 10.1-10.4.

**Homework:** Problems will be assigned weekly related to the material covered in lectures

**Evaluation method:** Students' progress will be evaluated according to their performance in the quizzes, two midterms and a final exam. There will be five quizzes and two midterm (MT) exams. The quizzes will be given during the PSs. The MT Exams 1 and 2 are planned to be held during the weeks of October 26 and December 7, respectively. Quiz problems will be selected from a list of suggested HW exercises posted on the course website prior to quizzes. The MT exams will cover the material not covered in the earlier exams. The final exam will be a comprehensive exam covering all the material of the course. The contribution of the quizzes, midterm and final exams are as follows: Quizzes 1% each, midterm exams 25% each, final exam 40%.

**Attendance:** Students are required to attend all the lectures and PSs, TAs will take attendance in the PSs. PS attendance will be computed based on the percentage of your attendance and will contribute 5% to your grade.

**Passing Grade:** At least 40 out of 100.

Make-up Policy: There is no make-up for exams in general; but in case of documented valid excuses (e.g., cases of illness, family emergencies, or attendance to university endorsed activities), a comprehensive make-up will be administered after the final for a missed midterm or final. Note that even if you miss a midterm, you will have to take the comprehensive make-up given after the final. If you miss more than one exam, the grade you receive from the make-up will count for all missed exams. If you miss a quiz with such a valid excuse, you are also entitled to take a make-up for the quiz you missed.

**Policy for Auditing Students:** In order to get an AU in this course a student should attend a minimum of 20 lectures. To determine this, the auditing student(s) should contact the instructor at the end of each class and ask to sign a special attendance sheet.

**Academic Dishonesty:** Students and faculty adhere to the following principles of academic honesty at Koç University. Cheating, plagiarism, and collusion are serious offenses resulting in an F as well as serious disciplinary action.