**Math 107: Calculus II, Fall 2012**

**Syllabus**

**Title of the Course:** Calculus II

**Instructor:** Ali Mostafazadeh (Office: Sci.154; Office Hours: Tue. & Thu. 11:00-11:25 & 14:00-14:25**)**

**Main Textbooks:**

- Calculus, Early Transcendentals, 6th Ed., by James Stewart

- A First Course in Linear Algebra, by Ali Mostafazadeh (will be available at Copy Center by October 12)

**Website:** Visit[**http://home.ku.edu.tr/~amostafazadeh/**](http://home.ku.edu.tr/~amostafazadeh/) and follow the link [**Teaching**](http://home.ku.edu.tr/~amostafazadeh/teaching.htm) and thenMath 107.

**Topics to be covered**: Sequence and series of numbers; power series and their properties; Taylor and Maclaurin series; complex numbers; vector spaces; linear operators; matrices; systems of linear equations; inner-product spaces and orthogonality; eigenvalue problem

**Attendance:** Students are strongly advised to attend all the lectures and PSs. Up to **5 bonus points** will be added to the total numerical grade of those students who regularly attend the lectures and actively participate in the class activities.

**Evaluation method:** Students’ progress will be evaluated according to their performance in homework assignments and quizzes (20%), two midterm exams (15%+25%), and a final exam (40%). The schedule for the exams will be posted in the website of Math 107. The quizzes will be held during the PSs. They will take up to 30 minutes and include problems that are given in the homework assignments. The grade for each quiz and the corresponding homework assignment will be determined as follows. Among the homework problems only those that appear in a quiz will be graded and the result will be taken as the grade for the homework assignment. This will be compared with the grade for the corresponding quiz and the smaller of the two will be used in the computation of the numerical grade for the course. So if a student gets 18 out of 20 in a quiz and 12 out of 20 in the corresponding homework, then 12/20 will contribute to his (her) numerical grade.

**Homeworks:** Homework assignments will be announced through the website of Math 107 almost every week. Homework papers will be collected by the instructor of the course in class at the specified time. Late homeworks will be accepted, but 5 points out of 20 will be deduced for each day passed the deadline. Teaching assistants are not allowed to accept homework papers from the students. The graded homework papers will be returned to the students in the PSs.

**Eligibility to take the final exam:** Under the following conditions a student will not have the right to take the final exam and will automatically fail the course: The average of the student’s midterm exam grades is less than 30 out of 100 and the average of his (her) homework+quiz grades is less than 10 out of 20. For example, if a student’s average in two midterms exams is 05 out of 100 and his (her) average homework+quiz grades is 10 out of 20,(s)he qualifies to take the final exam. But if his (her) midterm exam grades average to 29 out of 100 and his (her) homework+quiz grades average to 9 out of 20, this student will not be eligible to take the final exam. The midterm exam(s) not taken by a student because of a valid excuse (a report from the KU Health Center or one of the deans) will not affect the computation of the average of the midterm exam grades for the purpose of deciding the student’s eligibility to take the final exam. If a student misses one midterm exam and has a valid excuse, the grade in the other midterm exam and the average of his (her) grades in the homeworks+quizzes will determine if (s)he can take the final exam. If (s)he misses both the midterm exams and has a valid excuse, then his (her) average in the homeworks+quizzes should at least be 10 out of 20 so that (s)he can take the final exam.

**Make-ups:** There is no make-up for homeworks, quizzes, and midterm exams. However, in determining the contribution of homework+quizzes the lowest two grades will be dropped. This means that a student can miss two homework+quizzes without a penalty. If a student misses a midterm exam, has a valid excuse, and qualifies to take the final exam, his (her) grade in the final exam will be substituted for the grade in the missed exam. If (s)he also misses the final exam, (s)he will be given zero in the exam(s) that (s)he has missed regardless of whether (s)he has a valid excuse or not. If a student who qualifies to take the final exam misses this exam and has a valid excuse, (s)he will be given a make-up exam. YÖK regulations regarding the make-up exam for the final will apply to students who qualify to take the final exam.

**Auditing Students:** In order to get an AU, a student must attend at least 30 lectures. Auditing students should contact the instructor at the end of each lecture and sign a special attendance sheet.

**Suggested Method of Study:** This is a serious mathematics course in which the student is exposed to a large number of abstract concepts and methods that (s)he has probably never seen or heard of before. It is not a course that a typical student can succeed by studying for a few days before each exam. Therefore, every effort will be made to make the students work regularly. The students are advised to study the subjects covered in class immediately after each lecture. Reading the lecture notes and the book is necessary for grasping the subject, but it is by no means sufficient. Students must try to reproduce the definitions and derive the results obtained in class on their own. They are expected to spend at least six hours per week on studying the material covered in class and working out the homework problems. It is absolutely essential to think about and study the concepts and methods before trying to solve specific problems.