

## MAT 120 : CALCULUS FOR FUNCTIONS OF SEVERAL VARIABLES SYLLABUS

Term: Summer 2015

**Catalog description:** Sequences, infinite series, power series, Taylor series. Vectors, lines and planes in space. Functions of several variables: Limits, continuity, partial derivatives, the chain rule, directional derivatives, tangent plane approximation, differentials, extreme values, and Lagrange multipliers. Double integrals with applications. The line integral.

**Course Objectives:** The sequence Math 119-120 is the standard complete introduction to the concepts and methods of calculus, taken by all engineering students. The emphasis is on concepts, solving problems, theory and proofs. All sections take uniform midterm and final exams. Students develop their reading, writing and questioning skills in mathematics.

**Course Coordinator:** [Benjamin Walter](#) (office: TZ-32, phone: x3425, email: [egurel\\_at\\_metu.edu.tr](mailto:egurel_at_metu.edu.tr))

**Course Website:** <http://math.ncc.metu.edu.tr/math120>

Course grades and general course announcements will be posted on the course website. The website also contains links to WeBWorK and further course resources.

**Textbook:** *Calculus*, James Stewart, 7<sup>th</sup> international metric ed., 2012 (available at the bookstore)

**Exams and Grading:** Course grades are determined by online homework ( [WeBWorK](#)), short exams (organized by the teaching assistants), two (non-cumulative) midterm exams, and a cumulative final exam.

- WebWork: 10 %
- Short Exams: 2x10% =20%
- Midterm Exam: 30%
- Final Exam: 45 %

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- TOTAL = 105%

**Homework:** There will online homeworks assigned and graded using the online [WeBWorK system](#).

**Short Exams:** There will be 3 short exams, and each is worth 7% of your total grade. Problems in short exams will be chosen from the suggested problems which can be found on the course web site, and from the previous WebWork assignments. Their timing will be announced by TAs. ***Please contact your TAs anything related to Short Exams.***

**Make-up Midterm Policy:** In order to be eligible to enter the make-up examination for a missed (midterm or final) examination, a student should have a documented or verifiable, and officially acceptable excuse. **It is not possible to make up multiple missed exams.** The make-up examination for all exams will be after the final exam, and will include all topics.

**Missed Short Exam Policy:** At most one short exam may be missed with a valid, acceptable excuse. This short exam's grade will be replaced by the average grade of the other exams.

**NA Grade Policy:** Students who don't attend any of the midterm and final exams will automatically be given an NA grade for the course. Students with NA grade are not eligible to take re-sit exams.

**Cheating Policy:** Cheating on any midterm or short exam will result in any of the following: (1) immediate score of 0 on that exam, (2) immediate grade of FF in the course, (3) forwarding the case to the university disciplinary committee.

**Math Help Room:** Office hours will be held in the [mathematics help room](#) (T-103). Students are encouraged to visit the help room both at the office hours of their own instructors, and others. The room can also be used for studying and for working in groups. **Students are also encouraged to seek out instructors in their offices.**

**Suggested Problems:** For each lecture, the assistants will announce additional suggested problems from the textbook. These problems will not be graded. The list of problems is available on the course website.

Lectures		
S1 - A. Dosi	Mon 13:40-16:30 Tue 8:40-11:30 Thu 13:40-16:30	TZ-07
S2 - E. Gurel	Mon 8:40-11:30 Wed 8:40-11:30 Thu 8:40-11:30	TZ-20
Recitations		
R1 - A. Ozer	Fri 8:40-11:30	TZ-19
R2 - A. Ozer	Fri 13:40-16:30	TZ-19

## Important Dates

- **June 29:** Classes Start
- **July 17-19:** HOLIDAY (Friday)
- **July 20:** HOLIDAY (Monday)
- **August 11:** Classes End (Friday schedule)
- **August 12-15:** Finals Period