

# MATH 119: Calculus With Analytic Geometry (Spring 2015)

**Credit:** (4-2)5

**Catalog description:** Functions, limits, continuity and derivatives. Applications: extreme values, the Mean Value Theorem and its applications, graphing. The definite integral. Area and volume as integrals. The indefinite integral. Transcendental functions and their derivatives. L'Hospital's Rule. Techniques of integration. Improper integrals.

**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:** Salih Durhan (office: R-142, phone: x2923, email: sdurhan@metu.edu.tr)

**Course Website:** <http://math.ncc.metu.edu.tr/math119>

(We are currently transitioning online course materials to [ODTU-Class](#). You are responsible for regularly checking ODTU-Class for announcements.)

**Exams and Grading:** Course grades are determined by (online and written) homework, short exams, two (non-cumulative) midterm exams, and a cumulative final exam, as well as a small number of bonus points.

- Exam 1: 21 %
- Exam 2: 21 %
- Final Exam: 35 %
- Short Exams: 21 % (3x7%)
- Webwork: 7 %
- Total: 105 %

**Short Exams:** Problems in short exams will be chosen from the Webwork problems.

**Textbook:** *Calculus*, James Stewart, 6th metric international ed., 2009. (available at the bookstore)

**Make-up Policy:** In order to be eligible to enter the make-up examination for a missed examination, a student must 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. If you miss more than two exams (short exam or midterm) you will receive N/A grade for the course.**

**Math Help Room:** The [mathematics help room](#) in T-103 is a room staffed by mathematics faculty and teaching assistants where students may ask questions, work on homework. *Students are also invited to seek out instructors in their offices.* The schedule of the math help room is available at:

<http://math.ncc.metu.edu.tr/helproom.php>

## Instructors

INSTRUCTOR	SECTION	OFFICE	PHONE	E-MAIL
<a href="#">Kursat Aker</a>	Sections 1,2	TZ-42	3433	<i>kaker@metu.edu.tr</i>
<a href="#">Emel Bilgin</a>	Section 3	TZ-30	3423	<i>bemel@metu.edu.tr</i>
<a href="#">Salih Durhan</a>	Sections 4,5	R-142	2923	<i>sdurhan@metu.edu.tr</i>
<a href="#">Benjamin Walter</a>	Section 6	T-124	3001	<i>benjamin@metu.edu.tr</i>

## Assistants

ASSISTANT	RECITATION	OFFICE	PHONE	E-MAIL
<a href="#">Münevver Çelik</a>	Recitations 1,2,4,5	SZ-43	2953	<i>mucelik@metu.edu.tr</i>
<a href="#">Arda Buğra Özer</a>	Recitations 3,6	SZ-36	2946	<i>abozer@metu.edu.tr</i>

**Course Structure :** There will be 28 lectures given by the instructors, each lasting 2 class hours. The actual timing of the lectures may differ slightly from section to section because of the holidays, but the total number will be the same. Besides these lectures, there will be recitations, 2 hours per week, during which the assistants will solve extra problems and give quizzes.

You can find a rough guideline for the content of course lectures on the course website and ODTU-Class. Professors may reorder content as necessary/desired. The sections given in the above link are from the textbook.

Exam dates will be determined by the university administration later in the semester.

### Important Dates

- **February 16:** Classes Start
- **February 23-27:** Add-Drop
- **April 23:** **HOLIDAY (Thursday)**
- **April 24:** Withdrawal deadline
- **May 1:** **HOLIDAY (Friday)**
- **May 19:** **HOLIDAY (Tuesday)**
- **May 22:** Classes End
- **May 25-June 6:** Finals Period
- **June 13:** Grades Announced
- **June 17-19:** Resit Exams