

Math 170 - Fall Semester 2019-2020
Course Information

Instructors:

- **Sections 1 and 2:** Ahmet Nedim Narman (Office: Dolapdere 402B) **e-mail:** nedim.narman@bilgi.edu.tr

Office hours:

- Ahmet Nedim Narman : Tuesdays between 13:30-16:30, Dolapdere D402b

Teaching Assistants:

- Begüm Gülşah Çaktı **e-mail:** begum.cakt@bilgi.edu.tr **Office Hours:** TBA
- Umutcan Erdur **e-mail:** TBA **Office Hours:** TBA

Make sure to email your teaching assistant and make an appointment before going to the office hour. Your teaching assistants have their own academic work, and you should be thankful that they have agreed to have office hours.

Course textbook: James Stewart, Calculus 7th edition.

Other course related materials: R.Adams, Calculus - A Complete Course 6th edition.

Grade distribution: Final 60%, midterm 40%.

Course Plan:

WEEK 1: Multivariable functions, partial derivatives, the Chain Rule, implicit differentiation

WEEK 2: Gradients, maximum/minimum in the multivariable case, Lagrange multipliers

WEEK 3: Polar, cylindrical and spherical coordinate systems; curves and surfaces in \mathbb{R}^2 and \mathbb{R}^3 .

WEEK 4: Double integrals and their applications

WEEK 5: More on double integrals, Fubini's Theorem.

WEEK 6: Triple integrals, triple integrals in cylindrical and spherical coordinates.

WEEK 7 : Change of variables in Multiple Integrals.

WEEK 8: Midterm exam!

WEEK 9: Line integrals

WEEK 10: Green's and Stokes' Theorem.

WEEK 11: Surface integrals, curl and divergence.

WEEK 12: Stokes Theorem

WEEK 13: Sequences, series and power series, convergence tests.

WEEK 14: McLaurien series, Taylor series.

Further information and rules:

- You are responsible for following the Bilgi Online web page of this course regularly. Announcements, related course materials and exam results will be posted there.
- There will be no quizzes, however there will be lists of problems (named as homeworks) posted online. Problem lists will consist of problems which will be discussed in class hours or left to the students as exercise. The solutions to these problem lists will not be collected.
- The Solution keys to these homeworks will be posted the next week.

The instructor of this course warns you to try and solve the homeworks every week, before getting the solutions. Do not trick yourself into believing that you can pass this course by just reading the solutions (without you, yourself trying to solve them first) or (god forbid) just by skimming them before an exam.

If you do not study in a weekly manner, the amount of work will pile up and you **will be** crushed under it's weight.

- It is strongly recommended that you do not restrict yourselves to solving listed problems only. You may use related textbooks to find practice problems. Buying the textbook is not required. However, it is strongly recommended that you do readings from the textbook or compatible books to support your learning.
- You can get further assistance from the instructor and your teaching assistant by following their office hours. If you have a lecture during the office hours you may try to get an appointment from **your** teachers via e-mail.
- **Attendance is hereby announced to be obligatory**, failing to attend more than 30% of the lectures will result in you not being allowed in the final and hence failing the course. Repeat students are exempt from this rule. Class attendances are taken only for statistical purposes and are not included in this rule.

The instructor would also like you to know that, he is not putting these rules in place for himself. He does so for the benefit of the student and to improve the level of education the students of this course receive. In fact, it would have been much easier for the instructor to just ignore everything and save himself from a significant amount of work.

- To be eligible for a midterm make-up, you must notify the instructor as soon as possible when it becomes clear that you will miss the midterm AND document your excuse **in detail** afterwards. At this point I would like to warn everyone that, due to school wide regulations and the hardened stance the faculty of engineering and natural sciences was forced to take on the matter, only excuses with serious implications will be accepted for the midterm make up. Which implies, doctor's note of cold/flu or any such trivial matter is not acceptable. You must make your request within the 7 days following the midterm (or your recovery, in case you are unable to communicate earlier). Make-up requests for the final exam are handled by the Student Affairs office and not by the instructor.