

# Tárgytematika / Course Description Calculus 1.

#### **GKNB\_MSTA053**

Tárgyfelelős neve /

Teacher's name: dr. Kallós Gábor Félév / Semester: 2022/23/1

Beszámolási forma /

**Assesment:** Folyamatos számonkérés

Tárgy heti óraszáma / Tárgy féléves óraszáma /

Teaching hours(week): 1/1/1 Teaching hours(sem.): 0/0/0

# OKTATÁS CÉLJA / AIM OF THE COURSE

The main objective of the course is to learning the basic concepts and methods, their computational tools and applications in engineering environment of one and several variable functions, including the differential and integral calculus of one variable functions.

### TANTÁRGY TARTALMA / DESCRIPTION

During the programme the students perform projects, some of which requiring mathematical competencies to be taught in atoms. In this course the topics of the related atoms and the related projects are listed below:

#### Atoms:

- Vectors, coordinate systems
- Complex numbers
- Functions of one variable: basic functions, properties, graphs, limits, continuity, differentiation

#### SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESMENT'S METHOD

Evalution will take place as follows: written or oral assessment of atoms (50%) AND class and project participation (50%).

Written or oral assessment of atoms (50%): will evaluate students' knowledge related to the course material. The assessment takes place throughout the semester.

Class and project participation (50%):

- Class participation (20%) will be evaluated based on presence and the quality of questions and comments during class time. Throughout the semester at least three (3) substantive questions are expected form each student during class or consultation time
- Successful completion of project work related to the course throughout the semester (30%)

Assessment is performed on a scale of five grades. Grades will be determined as follows: 0-51% fail,

52-61% passable, 62-71% satisfactory, 72-81% good, 82-100% excellent.

## KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

https://openstax.org/subjects/math

Calculus 1, Calculus 3.

K.A: Stroud: Engineering Mathematics.