Tárgytematika

EÖTVÖS LORÁND TUDOMÁNYEGYETEM
TÁTK Közgazdaságtudományi Tanszék
(TÁTK-KOZGAZ-TANSZ)

2019/20/1

Tárgynév:	**Calculus**
Tárgykód:	**ECBA002**
Tárgyfelelős neve:	**Horváth Áron Botond**
Tárgy követelménye:	**gyakorlati jegy (5)**
Tárgy heti óraszáma:	**0/4/0**

Oktatás célja:

The aim of this course is to equip students with the basic BA-level mathematical knowledge needed to

1. Understand and master economics courses and topics in microeconomics, macroeconomics and econometrics

2. Develop a strong quantitative skill set relevant for economics research and job market tasks.

Upon completion of the course, students will be in the possession of a strong mathematical background supporting economic analysis.

Tantárgy tartalma:

Week 1.: Functions of One Variable
Week 2.: Limits and Continuity
Week 3.: Differentiation of Functions of a Single Variable
Week 4.: Further Topics in Differentiation
Week 5.: Properties of Continuous and Differentiable Functions I-II
Week 6.: Properties of Continuous and Differentiable Functions III; Single Variable Optimization I.
Week 7.: Single Variable Optimization II.; Midterm
Week 8.: Basics of Linear Algebra
Week 9.: Determinants, Transpose, and Inverse of a Matrix
Week 10.: Functions of Several Variables; Relations
Week 11.: Topics in Comparative Statistics
Week 12.: Multivariate Optimization
Week 13.: Constrained Optimization; Final Exam

Számonkérési és értékelési rendszere:

Class participation is mandatory, repeated failure of attendance can lead to failure on the course. Students are required to pass a written midterm and final exam (exact dates will be set in one of the first classes). A minimum of 40% is required to pass each

Számonkérési és értékelési rendszere:

exam, but a minimum of 50% is required on the overall score to pass the course.
The grading commences as follows:
0 - 49% - Fail (1)
50 - 59% - Sufficient (2)
60 - 74% - Average (3)
75 - 84% - Merit (4)
85 - 100% - Excellent (5)

Kötelező irodalom:

Sydsaeter, Knut – Hammond, Peter J: Mathematics for Economic Analysis. Pearson Publishing. (Most modern edition will be ok).