FACULTY OF **ECONOMICS**

DEGREE COURSE: **BUSINESS AND ECONOMICS BA**

SUBJECT: MATHEMATICAL METHODS

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OBJECTIVES

This course aims to introduce the basic mathematical concept and to develop arguments presented in the introductory section in order to provide students with operational tools to be applied both during this course and in other courses where quantitative methods are used, namely in Financial Mathematics or Statistics.

At the end of this course, students will have mastered the appropriate tools to better understand both mathematical and quantitative aspects of economic models.

CONTENTS

1 Basic notions
2 Functions of one real variable
3 Limits
4 Differential calculus
5 Spaces
6 Matrices
7 Systems of linear equations

ASSESSMENT

Written exam: multiple choice and open questions

RECOMMENDED TEXTBOOKS

- Lang S., "Undergraduate Analysis" Springer Verlag, 1995.
- Ayres F. and E. Mendelson, "Schaum's Outline of Calculus", Schaum's Outlines, 2012.

- Lipson M. and S. Lipschutz, "Schaum's Outline of Linear Algebra", Schaum's Outlines, 2008.