COURSE DESCRIPTION

University: Comenius University in Bratislava

Faculty: Faculty of Pharmacy

Course ID:	**Course title:**
FaF.KFChL/18-Mgr/19	Mathematic for Pharmacists

Educational activities:
Type of activities: lecture / seminar
Number of hours:
per week: 1 / 2 **per level/semester:** 14 / 28
Form of the course: on-site learning

Number of credits: 3

Recommended semester: 1.

Educational level: I.II.

Prerequisites:

Course requirements:
During full-time teaching, students will write 8 to 10 tests for a total of 40 points during the semester, and a written test worth of 60 points is written at the exam. Points from tests at seminars and from the current test at the exam are added together. In case of on-line teaching, students write a test worth of 100 points.
To obtain an A rating, it is necessary to obtain at least 92 points, to obtain an B rating at least 84 points, to obtain a C rating at least 76 points, to obtain a D rating at least 68 points and to obtain an E rating at least 61 points.
Scale of assessment (preliminary/final): Seminar tests: maximum 40 points (full-time teaching)Final exam test: maximum 60 points (full-time teaching)Final exam test: maximum 100 points (on-line teaching)

Learning outcomes:
After completing the course, students will master the basics of higher mathematics, practical applications of discrete mathematics methods, introduction to mathematical analysis, differential and integral calculus. They will be able to use this knowledge in the study of physics, physical chemistry, biophysics, pharmaceutical technology and other related specialised subjects of the study program Pharmacy.

Class syllabus:
Discrete mathematics - propositional logic. Sessions and functions - function definition and graph of function. Elementary functions. Real functions of a real variable. Sequences and numerical series - limits of sequences. Infinite numerical series and power series, approximation of functions. Differential calculus - limit and derivative, differential and difference. Analzsis of real functions. Integral calculus - primitive function, indefinite and definite integral and its applications. Functions of several variables - partial derivation, total derivation and total differential. Ordinary first order differential equations and their applications.
Lectures from the subject Mathematics for Pharmacists are supplemented by a seminar, where students verify their theoretical knowledge and acquire skills in solving mathematical examples.

Recommended literature:
V. Frecer: Matematika pre farmaceutov, UK, Bratislava, 2014.
M. Jasem, Ľ. Horanská: Matematika I. Zbierka úloh, Bratislava, STU, 2010.

Languages necessary to complete the course:
Slovak language

Notes:
The course is provided only in the winter semester.

Past grade distribution
Total number of evaluated students: 94

A	B	C	D	E	FX
11,7	14,89	19,15	14,89	29,79	9,57

Lecturers: doc. Ing. Vladimír Frecer, DrSc., doc. Mgr. Marcela Chovancová, PhD.

Last change: 26.11.2021

Approved by: