

# SYLLABUS

REGARDING THE QUALIFICATION CYCLE FROM 2026 TO 2029  
ACADEMIC YEAR 2028/2029

## 1. BASIC COURSE/MODULE INFORMATION

Course/Module title	Diploma Seminar
Course/Module code *	
Faculty (name of the unit offering the field of study)	Faculty of Exact and Technical Sciences
Name of the unit running the course	Institute of Mathematics
Field of study	Mathematics
Qualification level	First-cycle studies
Profile	General academic
Study mode	Full-time
Year and semester of studies	Year 3, semester 5 and 6
Course type	Major subject
Language of instruction	English
Coordinator	
Course instructor	

\* - as agreed at the faculty

### 1.1. Learning format – number of hours and ECTS credits

Semester (no.)	Lectures	Classes	Laboratories	Seminars	Practical classes	Internships	others	ECTS credits
5				30				3
6				30				7

### 1.2. Course delivery methods

- conducted in a traditional way  
 involving distance education methods and techniques

1.3. **Course/Module assessment** (exam, pass with a grade, pass without a grade) - **Seminar - non-graded pass**

## 2. PREREQUISITES

Knowledge of topics from general and major subjects included in the curriculum of first-cycle studies in the field of mathematics.

## 3. OBJECTIVES, LEARNING OUTCOMES, COURSE CONTENT, AND INSTRUCTIONAL METHODS

### 3.1. Course/Module objectives

O1	Preparation for independent searching of literature related to a specific topic.
O2	Preparation for independent work with a mathematical text.
O3	Developing the skills to prepare and present papers on mathematical topics.
O4	Preparation for editing one's own mathematical text (diploma thesis).

### 3.2. COURSE/MODULE LEARNING OUTCOMES (TO BE COMPLETED BY THE COORDINATOR)

Learning Outcome	The description of the learning outcome defined for the course/module	Relation to the degree programme outcomes
LO_01	The student knows and understands the basic principles related to the protection of intellectual property and copyright as well as the legal conditions of scientific activity.	K_W09
LO_02	The student speaks freely, using strict language about mathematical issues.	K_U17
LO_03	The student compares and verifies mathematical issues on the basis of various sources used when writing a diploma thesis.	K_U18
LO_04	The student is able to plan and organize research work including: analyzes problems and finds solutions based on known definitions	K_U20

Learning Outcome	The description of the learning outcome defined for the course/module	Relation to the degree programme outcomes
	and theorems, independently creates elaborations on mathematical issues, is able to prepare a bachelor thesis plan, gather bibliography for it and write the thesis using auxiliary sources.	
LO_05	The student is ready to independently solve cognitive and practical problems and to seek expert advice in case of difficulties in independently solving the problem. Student is able to apply appropriate research methods to solve problems specific to the scientific discipline in which they specialize.	K_U22
LO_06	The student understands the need for continuous learning and improving their qualifications.	K_K01
LO_07	The student analyzes with understanding the content from literature used to write the diploma thesis. Student is able to verify the correctness of theses and proofs of theorems used when writing the thesis.	K_K02
LO_08	The student skillfully plans and organizes work, manages their time, i.e. sets priorities serving the creation of the thesis.	K_K07

### 3.3. Course content (to be completed by the coordinator)

#### Seminar

Content outline
<b>Semester 5</b>
Familiarization with the topic of the diploma seminar, distribution of paper topics.

Presentation by students of issues consistent with the assigned topics.
Establishing topics and discussing minimum requirements for diploma theses.

<b>Semester 6</b>
Presentation of problems related to the subject of diploma theses.
Discussion of issues related to the diploma exam.

### 3.4. Methods of Instruction

**Seminar:** papers, analysis of mathematical texts, discussion.

## 4. Assessment techniques and criteria

### 4.1 Methods of evaluating learning outcomes

Learning outcome	Methods of assessment of learning outcomes (e.g. test, oral exam, written exam, project, report, observation during classes)	Learning format (lectures, classes,...)
LO_01	paper, diploma thesis, observation during classes	seminar
LO_02	paper, observation during classes	seminar
LO_03	paper, diploma thesis, observation during classes	seminar
LO_04	paper, diploma thesis	seminar
LO_05	diploma thesis, observation during classes	seminar
LO_06	observation during classes	seminar
LO_07	paper, diploma thesis, observation during classes	seminar
LO_08	observation during classes	seminar

### 4.2 Conditions for passing the course (assessment criteria)

5th semester – passing the seminar on the basis of a prepared and presented paper on a given topic and presenting a diploma thesis plan

6th semester - passing the seminar on the basis of a completed and submitted bachelor's thesis.

**5. Total student workload needed to achieve the intended learning outcomes  
– number of hours and ECTS credits**

Activity	Number of hours
Course hours	60
Other contact hours involving the teacher (consultation hours, examinations)	20
Non-contact hours - student's own work (preparation for classes or examinations, projects, etc.)	190
Total number of hours	270
Total number of ECTS credits	10

\* One ECTS point corresponds to 25-30 hours of total student workload

**6. Internships related to the course/module**

Number of hours	<i>Not applicable</i>
Internship regulations and procedures	<i>Not applicable</i>

**7. Instructional materials**

Compulsory literature: articles from mathematical journals in accordance with the topics of the theses
Complementary literature: textbooks containing basic knowledge related to the topics of the theses

Approved by the Head of the Department or an authorised person