

ROMANIAN ACADEMY**School of Advanced Studies of the Romanian Academy (SCOSAAR)****BRIEF COURSE DESCRIPTION: „ELEMENTS OF THE CALCULUS OF VARIATIONS” 2022****1. Programme information**

1.1 Department	Doctoral School of Mathematics and Informatics
1.2 Institution	Romanian Academy
1.3 Field of study	Mathematics
1.4 Study cycle	Doctoral studies

2. Course information

2.1 Course title	Elements of the Calculus of Variations						
2.2 Course instructor	Prof. Dr. Lucian Beznea						
2.3 Seminar instructor	Prof. Dr. Lucian Beznea						
2.4 Laboratory instructor							
2.5 Year of study	I	2.6 Semester	I	2.7 Type of assessment	E*	2.8 Course category	DF**

3. Estimated total time (hours per semester of teaching activities)

3.1 Number of hours per week							4	Of which:			
3.2 lecture							2	3.3 seminar	2	3.4 laboratory	0
3.5 Total hours in the curriculum							56	Of which:			
3.6 lecture							28	3.7 seminar	28	3.8 laboratory	0
Allocation of time:											hours
Study based on textbook, course materials, bibliography and notes											60
Additional study in the library, on specialized electronic platforms and in the field											100
Preparation for seminars/laboratories, assignments, reports, portfolios and essays											100
Tutoring											55
Examinations											4
Other activities:											—
3.9 Total individual study hours							319				
3.10 Total hours per semester							375				
3.11 Number of credits							15				

4. Learning outcomes and specific competencies acquired

1. Mastery of the material taught in the course;
2. Ability to use the presented results in new contexts;
3. The knowledge and skills acquired in this course will provide a foundation for future scientific research and teaching activities.

5. Assessment

Type of activity	5.1 Assessment criteria	5.2 Assessment methods	5.3 Weight in final grade
5.4 Lecture	Acquired knowledge	Written examination	65%
5.5 Seminar	Activity	Case study presentations	35%
5.6 Laboratory			
5.7 Minimum performance standard: Knowledge of 70% of the information contained in the course			

Course instructor signature
Prof. Dr. Lucian Beznea

Seminar instructor signature
Prof. Dr. Lucian Beznea

Laboratory instructor signature

*E = Examination. C = Colloquium.

**DF = Fundamental Course. DS = Specialized Course.