

## Theoretical Mechanics Course Description

**Faculty:** Faculty of Natural Sciences

**Study program:** Physics

**Course Title:** Theoretical Mechanics

**Course Credits:** 9 (ECTS)

**Language of Instruction:** Albanian

**Course Description:** The main objective of the course is to give students the physical and mathematical notions to solve different physical problems, through the construction of a mathematical model and the solution of systems differential equations that describe this model. Emphasis is placed on acquiring the scientific method. The student must have basic knowledge in the field of classical mechanics and flow mechanics; also, he must have the basic knowledge of mathematics, mainly in the field of differential equations and analytical geometry

**Course Goals:** Through this program, students will deepen their knowledge in the field of classical mechanics and will be further trained to materialize the knowledge gained in other fields, e.g. of mathematics, making them applicable in the field of physics.

**Course Requirements:** The assessments which contribute to course score are listed below:

- Participation: 5 points
- Activation: 5 points
- Assignment 1: 10 points
- Assignment 2: 10 points
- Final Exam: 70 points

**Grading:** The above activities constitute a quantity of 100 points which are converted into the respective grades:

- 0-44 points ->grade4;
- 45-54points ->grade 5;
- 55-64points ->grade 6;
- 65-74points ->grade 7;
- 75-84 points ->grade 8;
- 85-94points ->grade 9;
- 95-100 points ->grade 10

**Course Schedule:** The course extends over 15 weeks in the first semester of the second year of study. The student will have the opportunity to attend 3 hours of lectures and 3 hour of seminar per week.

Attendance:

- Lectures are optional
- Seminars should be attended to 75% (when the student participates less than 75% does not have the right to attend the exam but passes in the next season)