

## **Bio-Physics\_Course Description**

**Faculty:** Faculty of Natural Sciences

**Study program:** Biology-Chemistry

**Course Title:** Bio-Physics

**Course Credits:** 4 (ECTS)

**Language of Instruction:** Albanian

**Course Description:** This course provides fundamental knowledge from all disciplines of Physics such as:

- mechanics
- thermodynamics
- electricity
- magnetism
- vibrations
- optics
- construction of matter

The program also includes some knowledge in the field of biophysics, such as:

- impedance of biological systems
- membrane biopotentials
- electrical conductivity of the heart and muscles (ECG, EMG).

**Course Goals:** The subject General Physics is one of the disciplines of general education. The object of this course is to deepen the knowledge of all the concepts, laws and physical phenomena that have been mentioned in high school. On the other hand, the program enables students to interpret various physical phenomena being able to apply with accuracy in biological systems.

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

- Participation: 5 points
- Activation: 5 points
- Assignment 1: 15 points
- Assignment 2: 15 points
- Final Exam: 60 points

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

0-44 points -> grade 4;

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

**Course Schedule:** The course takes place the first semester in the first year of study. Students will have the opportunity to attend 2 hours of lectures and 1 hour of laboratory 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)
- 100% lab attendance is mandatory