Electrodynamic Course Description

Faculty: Faculty of Natural Sciences

Study program: Physics

Course Title: Electrodynamic

Course Credits: 7 (ECTS)

Language of Instruction: Albanian

Course Description: Knowledge of the subject "Electrodynamics" serves as a basis for in-depth knowledge of modern physics theories, such as field theories and quantum mechanics. The subject "Electrodynamics" aims to give students the most complete knowledge of electromagnetic fields. The analysis of electric and magnetic processes is done on the basis of Maxwell's system of equations, which is the complete system of Electrodynamics equations. Familiarity with this system of equations and their solutions serve students to learn the model of how certain phenomena of physics, such as electromagnetic fields, can be studied theoretically; in this subject, students also receive accurate information about the sources of electromagnetic fields, their propagation in space, about electromagnetic waves and about the emitters of these waves. The purpose of this course is to give students not only the theoretical knowledge of the electromagnetic field, but in the seminar sessions that will be organized in the auditorium, they will discuss in a deeper way to better understand the theoretical material.

Course Goals: Through this program, students will deepen their knowledge in the field of electromagnetism and will be further trained to materialize the knowledge gained in other fields, e.g. of applied physics, the study of radiation and aspects of environmental care.

Course Requirements: The assessments which contribute to course score are listed below:
- Participation: 5 points
- Activation: 5 points
- Assignement 1: 10 points
- Assignement 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 third year of study. The student will have the opportunity to attend 3 hours of lectures and 2 hours of seminars 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)