## **Elements of electrotechnics\_Course Description**

Faculty: Faculty of Natural Sciences

Study program: Bachelor in physics

Course Title: Elements of electrotechnics

**Course Credits**: 3 (ECTS)

## Language of Instruction: Albanian

**Course Description**: Elements of electrotechnics it is an elective formative discipline. Through this program, students will receive general information of its applications various fields of science and technology. This course provides the following basic knowledge:

- Irrational and logarithmic and exponential equations.
- Linear and non-linear systems.
- Difefererential equations with linear partial derivatives of the second order.
- Analysis of DC and AC circuits.
- Three-phase circuits.
- Electriccars, transformers, diodes and transistors

**Course Goals:** The course " Elements of electrotechnics " plays an important role in of its applications in various fields of science and technology

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

- Participation: 5 points
- Activation: 5 points
- Assignement: 15 points
- Laboratory: 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 5; 65-74 points -> grade 6; 75-84 points -> grade 7; 85-94 points -> grade 8; 95-100 points -> grade 10

**Course Schedule**: The course extends over the second semester of the third year of study. In the second semester, the student 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