

# **Biotechnology**

**Faculty** of Natural Sciences

**Study program:** BSC Biology- Chemistry

**Course Title:** Biotechnology

**Course Credits:** 3

**Language of Instruction:** Albanian

**Course Description:** Biotechnology deals with the use of cells on an industrial scale in the production of substances of interest to humans. The use of microorganisms in the production of antibiotics, the use of plant cultures in the production of disease-fighting substances. Animal cultures in the production of vaccines. Molecular biotechnology deals with molecular techniques in the production of DNA in the laboratory, in the creation of clones. in DNA sequencing, in the creation of genetic libraries.

**Course Goals:** The student acquires scientific and professional competencies which consist in gaining knowledge on the use of cells in technology and knowledge of methods and practices used today in biotechnology laboratories.

## **Course Requirements:**

Base literature:

BOZO DH 2000: Biotechnology Textbook.

Hajkola K 2009: Laboratory practice in biotechnology

Recommended literature

Thieman J. W . Palladino A M . 2012: Introduction to Biotechnology (3rd Edition)

Seidman L, Kraus M. E, Brandner D,2010: Laboratory Manual for Biotechnology and Laboratory

## **Grading:**

Attendance:

Lectures are optional

Students are obligated to follow 100% of laboratory classes

Continuous control: 20 points

Final Exam: 80 points

## **Course Schedule:**

First semester of third academic year.

Lecture: three hours in two weeks

Laboratories: two hours in two weeks

