INTRODUCTION INTO BIOMEDICINE AND BIOMEDICAL TECHNOLOGY

GENERAL INFORMATION

Course teacher	Prof. Ljubica Glavaš-Obrovac, MSc, PhD
Associates	Assoc. Prof. Tatjana Bačun, MD, PhD Asst. Prof. Marijana Jukić, Mbiol, PhD
Study programme	Undergraduate University Study of Medical Laboratory Diagnostics
Course status	mandatory
Year of study, semester	1st year, 1nd semester
ECTS credits	**1**
Form of teaching (number of classes)	Lectures: 5; Seminars: 10
Expected number of students	30-35

COURSE DESCRIPTION

Course objectives

To acquaint students with basic medical concepts and explain the historical, scientific and intellectual task as well as the main task of the bachelor's degree in medical laboratory diagnostics in the health sector.

Course entry requirements and competencies needed for the course

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Learning outcomes at the study programme level

1.1, 2.7

Expected learning outcomes at the course level

After attending lectures, completing seminars and exercises, independent study and passing the exam, students will be able to:

1. explain the rapid development of the profession.
2. evaluate past and present health problems.
3. explain the importance of developing new approaches in methods and diagnostic procedures for the prevention, detection and treatment of diseases, with the aim of improving and preserving people's health.
4. develop skills of critical and comparative thinking in the field of development of biomedical sciences and public health.

Course content

Lectures: Introduction to biomedical technology. Origins and determinants of the development of medical concepts based on the development of physics, chemistry and biology. The importance and role of medical-laboratory diagnostics in the prevention, detection, treatment and monitoring of diseases.

Seminars: Areas of medical-laboratory diagnostics. Rules of good laboratory practice. Strategy of a rational approach to medical laboratory processing. The role and place of laboratory testing in the treatment of patients.

Forms of teaching

Lectures and seminars

Students' responsibilities

Attendance is obligatory throughout all course forms, and the student has to attend all the exams. Student absence of up to 30% is considered acceptable in each teaching form. Practical work and seminars that were not completed have to be taken in the form of colloquiums.

Monitoring students' work *(Connecting learning outcomes, teaching methods and evaluation)*

Teaching activity	ECTS		Student activity		Grade points

		Learning outcome		Evaluation methods	Min.	Max.
Attending classes	0.2	1-4	Attendance, Seminar paper	Attendance records	5	10
				Writing and presenting seminar paper	15	40
Final exam	0.8	1-4	Studying for final exam	Written exam	30	50
Total	**1**				**50**	**100**

Evaluation of written part of final exam:

Percentage of correct answers (%)	Grade points
60.00-64.99	30
65.00-69.99	33
70.00-74.99	36
75.00-79.99	39
80.00-84.99	42
85.00-89.99	45
90.00-94.99	47
95.00-100	50

Formulating the final grade:
Grade points achieved in classes are combined with points achieved in the final exam. Grading system involves absolute grading and represents one's final achievement. Grades are numerically expressed as follows: A – excellent (5): 80-100 grade points; B – very good (4): 70-79.99 grade points; C – good (3): 60-69.99 grade points; D – sufficient (2): 50-59.99 grade points.

Assigned reading (available in the library and in other media)

Title	Number of copies in the library	Availability in other media
E. *Topić*, D. *Primorac*,. S. *Janković*, M. Štefanović i sur. *Medicinska biokemija i laboratorijska medicina u kliničkoj praksi. Medicinska naklada, Zagreb, 2018.*	8	

Further reading
Selected scientific and professional papers.

Quality assurance methods that ensure the acquisition of exit competencies
Anonymous, quantitative, standardised students' opinion survey on the course and teacher's work, carried out by the Quality Assurance Office of the Faculty of Medicine in Osijek.

Note
E-learning is not included in the standard course hours, but is used in classes and contains links to various pages, video and audio materials available on the Internet.