

PRESENTATION OF THE UNDERGRADUATE STUDIES PROGRAM – CURRICULUM OVERVIEW

The Undergraduate Studies Program of the Department of Biomedical Sciences "summary tables with duration, courses, course classification (compulsory, core, general background, elective, specialty), hours of theory, practical exercises, laboratories, credit units, ECTS" is presented.

Table I. Summary of the Undergraduate Study Program of the Department of Biological Sciences

Semester							
1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th
Biology-Molecular Biology (CC)	Biochemistry II (Biomolecules Metabolism - Metabolism Disorders) (CC)	Bioethics (CC)	Human Physiology (CC)	Medical Biotechnology (CC)	Medical Virology (CC)	Immunology II (CC)	Molecular Diagnostics (CE)
Chemistry (CC)	Human Genetics (CC)	Applications of Informatics in Biomedical Sciences (CC)	Medical Microbiology I (Identification of Bacteria) (CC)	Medical Microbiology II (CC)	Immunology I (CC)	Clinical Chemistry IV (Laboratory Endocrinology and Special Biochemical Tests) (CC)	Preventive Medicine (CE)
Laboratory animals (CC)	General Microbiology (CC)	English Medical Terminology (CC)	Clinical Chemistry I (Urine and body fluid analyses) (CC)	Clinical Chemistry II (Diagnostic Enzymology - Clinical Biochemistry of Electrolytes) (CC))	Clinical Biochemistry of Metabolic and Degenerative Diseases (Clinical Chemistry III) (CC)	Medical Parasitology (CC)	Mechanisms and biochemical markers of ageing-disease and chronic diseases (CE)
Health and Laboratory Safety in Biomedical Sciences - First Aid (CC)	Human Anatomy (CC)	Blood Drawing Techniques (CC)	Hemopoiesis - Blood Physiology (Hematology I) (CC)	Anemias - Blood Transfusion (Hematology II) (CC)	Hematological Malignancies - Hemostasis (Hematology III) (CC)	Hygiene (CC)	Human microbiome (CE)
Biochemistry I (Structure &	Nuclear Medicine Physics	Nutrient Substrates (CC)	Biostatistics (CC)	Medical Cytology (CC)	Medical Mycology (CC)	Clinical Microbiology (CE)	Forensic Science: Forensic

Function of Biomolecules) (CC)	(CC)						Laboratory Techniques (CE)
Basic Histology and Methods of Study - General Embryology (CC)		Professional Ethics / Employment rights (CC)	Research Design (CC)		Laboratory Medical Cytology (CC)	Pharmacology-Toxicology (CE)	Diploma Thesis (Bachelor's Thesis) * (EC)
		General (Pathology (CC)	Systemic Pathology (CC)		Practical Training, I, (2months) (OC)	Quality control / Organization in Diagnostic Laboratories (CE)	Practical Training II / Clinical-Laboratory Training (5 months) (CC)
						*Diploma Thesis (Bachelor's degree) (CE)	

Compulsory Courses (CC)	Compulsory Elective courses (CE)	Optional courses (OC)	Total Courses
41	9	1	51

General background Course :GBC

Special background Course: SBC

Specialty Course:SC

General knowledge Course: GKC

CC: Compulsory, CE: Compulsory elective, OC: optional

Table II. The Undergraduate Study Program of the Department of Biological Sciences per Semester

1st Semester

No	COURSE CODE	Course	Course Type	TH	TU	L	Hours / week	WL	ECTS	Offered in English
1	285-1901011(TH) 285-1901012(L)	Biology-Molecular Biology	GBC (CC)	3		2	5	210	7	YES
2	285-1901021(TH) 285-1901022(L)	Chemistry	GBC (CC)	3		2	5	180	6	YES
3	285-190103	Laboratory animals	SBC (CC)	2			2	60	2	NO
4	285-190104	Health and Laboratory Safety in Biomedical Sciences - First Aid	GKC (CC)	2			2	90	3	YES
5	285-1901051(TH) 285-1901052(L)	Biochemistry I (Structure & Function of Biomolecules)	GBC (CC)	3	1	1	5	210	7	NO
6	285-1901061(TH) 285-1901062(L)	Basic Histology & Methods of Study - General Embryology	SBC (CC)	2	1		3	150	5	NO

ANNOTATIONS

TH: Hours of Theory,

TU: Tutorial / Practical Exercises,

L: Laboratory Exercise

WL: Workload for the whole academic semester

CC: Compulsory course

CE: Compulsory Elective Course

OC: Optional Course

ECTS: Credit Units (equal to European ECTS credit)

GBC: General Background Course

SBC: Special Background Course

SC: Specialty Course

GKC: General Knowledge Course

2nd Semester

No.	COURSE CODE	Course	Course Type	TH	TU	L	Hours / week	WL	ECTS	Offered in English
1	285-1902011(TH) 285-1902012(L)	Biochemistry II (Biomolecules Metabolism - Metabolism Disorders)	GBC (CC)	3	1	2	6	210	7	YES
2	285-1902021(TH) 285-1902022(L)	Human Genetics	SBC (CC)	3	1	2	6	210	7	YES
3	285-1902031(TH) 285-1902032(L)	General Microbiology	SBC (CC)	3	1	2	6	210	7	YES
4	285-190204	Human Anatomy	GBC (CC)	3			3	150	5	NO
5	285-190205	Nuclear Medicine Physics	GBC (CC)	2			2	120	4	NO

3rd Semester

No.	COURSE CODE	Course	Course Type	TH	TU	L	Hours / week	WL	ECTS	Offered in English
1	285-190301	Bioethics	GKC (CC)	2			2	60	2	NO
2	285-190302	Applications of Informatics in Biomedical Sciences	GKC (CC)	4			4	120	4	YES
3	285190303	English Medical Terminology	GBC (CC)	2			2	120	4	YES
4	285190304	Blood Drawing Techniques	SBC (CC)			3	3	120	4	NO
5	285-1903051(TH)) 285-1903052(L)	Nutrient Substrates	SBC (CC)	3	1	1	5	210	7	YES
6	285-190306	Professional Ethics / Employment Rights	GKC (CC)	2			2	60	2	NO
7	285-1903071 (TH) 285-1903072(L)	General Pathology	SC (CC)	3	1	2	6	210	7	NO

4th Semester

N o.	COURSE CODE	Course	Course Type	TH	TU	L	Hours / week	WL	ECTS	Offered in English
1	285-190401	Human Physiology	GBC (CC)	3			3	90	3	NO
2	285-1904021(TH) 285-1904022(L)	Medical Microbiology I (Identification of Bacteria)	SC (CC)	3	1	2	6	180	6	YES
3	285-1904031(TH) 285-1904032(L)	Clinical Chemistry I (Urine and body fluid analyses)	SC (CC)	3		2	5	150	5	YES
4	285-1904041 (TH) 285-1904042 (L)	Hemopoiesis – Blood Physiology (Hematology I)	SC (CC)	3		2	5	180	6	NO
5	285-1904051 (TH) 285-1904052 (L)	Biostatistics	SBC (CC)	1	1		2	60	2	NO
6	285-190406	Research design	GBC (CC)	2			2	60	2	YES
7	285-1904071 (TH) 285-1904072 (L)	Systemic Pathology	SC (CC)	3	1	2	6	180	6	NO

5th Semester

No.	COURSE CODE	Course	Course Type	TH	TU	L	Hours / week	WL	ECTS	Offered in English
1	285-1905011 (TH) 285-1905012 (L)	Medical Biotechnology	SC (CC)	3	1	2	6	210	7	NO
2	285-1905021 (TH) 285-1905022 (L)	Medical Microbiology II (Cultures of biological-body fluids and secretions - food - water)	SC (CC)	3	1	2	6	210	7	NO
3	285-1905031 (TH) 285-1905032 (L)	Clinical Chemistry II - (Diagnostic Enzymology - Clinical Biochemistry of Electrolytes)	SC (CC)	2		2	4	180	6	YES
4	285-1905041 (TH) 285-1905042 (L)	Hematology II – (Anemias - Blood Transfusion)	SC (CC)	3		2	5	180	6	NO
5	285-190505	Medical Cytology	SC (CC)	3			3	120	4	NO

6th Semester

No	COURSE CODE	Course	Course Type	TH	TU	L	Hours / week	WL	ECTS	Offered in English
1	285-1906011 (TH) 285-1906012 (L)	Medical Virology	SC (CC)	3	1	2	6	180	6	NO
2	285-1906021 (TH) 285-1906022 (L)	Immunology I	SC (CC)	3		2	5	150	5	YES
3	285-1906031 (TH) 285-1906032 (L)	Clinical Biochemistry of Metabolic and Degenerative Diseases (Clinical Chemistry III)	SC (CC)	3		2	5	150	5	NO
4	285-1906041 (TH) 285-1906042 (L)	Hematological Malignancies - Hemostasis (Hematology III)	SC (CC)	3		2	5	180	6	YES
5	285-1906051 (TH) 285-1906052 (L)	Medical Mycology	SC (CC)	2		2	4	150	5	NO
6	285-190606	Laboratory Medical Cytology	SC (CC)			2	2	90	3	NO
7		Practical Training, I/Clinical-Laboratory Training: 320 hours after the end of 6th semester (8 hours x 5 days x 8 weeks = 320 hours = 2 months, during the summer months or equivalent) *	SC (OC)				40	320	15	YES

*** According to the Internal Regulations of the I.H.U., the Work Load (WL) and ECTS of Optional Courses are not added to the WL and ECTS of the semester, nor to the total ECTS required for the degree and their grade does not contribute to the final grade of the degree. However, optional courses, their grade and ECTS are included in the transcript of records and the diploma supplement.**

7th Semester (All Compulsory Courses and 2 Compulsory Elective Courses shall be registered)

No.	COURSE CODE	Course	Course Type	TH	TU	L	Hours / week	WL	ECTS	Offered in English
1	285-1907011 (TH) 285-1907012 (L)	Immunology II	SC (CC)	3		2	5	180	6	YES
2	285-1907021 (TH) 285-1907022 (L)	Clinical Chemistry IV (Laboratory Endocrinology and Special Biochemical Tests)	SC (CC)	3	1	2	6	150	6	NO
3	285-1907031 (TH) 285-1907032 (L)	Medical Parasitology	SC (CC)	2	1	2	5	180	6	NO
4	285-190704	Hygiene	SC (CC)	2			2	60	2	YES
5	285-190705	Clinical Microbiology	SC (CE)	2			2	150	5	NO
6	285-190706	Pharmacology-Toxicology	SC (CE)	2			2	150	5	NO
7	285-190707	Quality control / Organization in Diagnostic Laboratories	SC (CE)	2			2	150	5	NO
8		*Diploma Thesis (Bachelor's degree)	SC (CE)					150	5	YES

*** The Diploma Thesis is a two-semester project and students who select this option must register for it also in the 8th semester.**

8th Semester (Mandatory Practical Training and 2 compulsory elective courses shall be registered)

No.	COURSE CODE	Course	Course Type	TH	TU	L	Hours / week	WL	ECTS	Offered in English
1	285-190801	Molecular Diagnostics	SC (CE)	2			2	150	5	NO
2	285-190802	Preventive Medicine	SC (CE)	2			2	150	5	NO
3	285-190803	Mechanisms and biochemical markers of aging, disease and chronic diseases	SC (CE)	2			2	150	5	NO
4	285-190804	Human Microbiome	SC (CE)	2			2	150	5	YES
5	285-190805	Forensic Science: Forensic Laboratory Techniques	SC (CE)	2			2	150	5	YES
6		Diploma Thesis (Bachelor's Thesis) *	SC (CE)					150	5	YES
7		Practical Training II / Clinical-Laboratory Training (5 months)	SC (CC)				30	600	20	YES

*** The Diploma Thesis is a two-semester project and students who select this option must register for it also in the 8th semester.**