

## University of Raparin College of Science Biology Department Undergraduate Curriculum (2023-2024)

	First Year/ Fall Semester	First Year/ Spring Semester							
Code	Course Title	Hours		ECTS	Code	Course Title	Hours		ECTS
		Theory	Practical	ECIS	Code	Course Title	Theory	Practical	ECIS
BIOU1S101	English Language I	4		5	BIOU1S201	English Language II	4		5
BIOU1S102	Kurdish Studies	2		4	BIOU1S202	Computer Programming	1	2	5
BIOU1S103	Information Technology	1	2	4	BIOU1S203	Academic Debate	2	2	5
BIOC1S105	Analytical Chemistry	2	3	6	BIOU1S204	Environmental Conservation (Elective)	2		3
BIO1S106	Biostatistics I	2	3	5	BIOU1S205	Social Awareness (Elective)			3
BIO1S107	General Biology I	2	3	6	BIOC1S206	Organic Chemistry	2	3	6
					BIO1S207	General Biology II	2	3	6
Total		13	11	30		Total	13	10	30
Total Hours per Week			24			Total Hours per Week		23	

	Second Year/ Fall Semester	Second Year/ Spring Semester							
Code	Course Title	Hours		ECTS	Code	Course Title	Н	Hours	
		Theory	Practical	ECIS	Code	Course Title	Theory	Practical	ECTS
BIO2S101	Academic Engish I	2		4	BIO2S201	Academic English II (Writing)	2		4
BIO2S102	General Microbiology	2	3	5	BIO2S202	General Microbiology	2	3	5
BIO2S103	Invertebrate	2	3	5	BIO2S203	Algae and Archegonia	2	3	5
BIO2S104	Histology	2	3	5	BIO2S204	Embryology	2	3	5
BIO2S105	Plant Anatomy	2	3	5	BIO2S205	Plant Taxonomy	2	3	5
BIO2S106	Biochemistry	2	3	6	BIO2S206	Clinical Biochemistry	2	3	6
Total		12	15	30		Total	12	15	30
Total Hours per Week			27			Total Hours per Week		27	

	Third Year/ Fall Semester		Third Year/ Spring Semester						
Code	Course Title	Hours		ECTS	Code	Course Title	Hours		ECTS
		Theory	Practical	ECIS	Code	Course Title	Theory	Practical	ECIS
BIO3S101	Mycology	2	3	5	BIO3S201	Virology	2	2	5
BIO3S102	Cell Biology	2	-	5	BIO3S202	Molecular Biology	2	3	5
BIO3S103	Ecology and Pollution	2	3	5	BIO3S203	Food And Industrial Microbiology	2	3	5
BIO3S104	Animal Physiology	2	3	5	BIO3S204	Plant Physiology	2	3	5
BIO3S105	General Entomology	2	3	5	BIO3S205	Medical Entomology	2	3	5
BIO3S106	Biostatistics II	2	-	5	BIO3S206	Research Methodology	2	-	5
•	Total		12	30		Total	12	14	30
Total Hours per Week			24			Total Hours per Week		26	

	Fourth Year/ Fall Semester					Fourth Year/ Spring Semester			
Code	Course Title	Hours		ECTS	Code	Cours Title	Hours		ECTS
		Theory	Practical	ECIS	Code	Cours ride	Theory	Practical	ECIS
BIO4S101	Medical Bacteriology	2	3	5	BIO4S201	Antibiotics	2	3	5
BIO4S102	Genetics I	2	3	5	BIO4S202	Genetics II	2	3	5
BIO4S103	Chordate and Comparative Anatomy	2	3	5	BIO4S203	Parasitology	2	3	5
BIO4S104	Immunology	2	3	5	BIO4S204	Immunology II	2	3	5
BIO4S105	Hematology and Endocrinology	2	3	5	BIO4S205	Quality Control	2	3	5
BIO4S106	Project	-	5	5	BIO4S206	Project	-	5	5
Total		10	20	30		Total	10	20	30
Total Hours per Week			30			Total Hours per Week		30	

Note: There will be compulsory summer training for ONE MONTH (120 hours) for a third-year student with a satisfactory grade.
The student will not award a B.Sc in biological science if they have not successfully completed the training course.