

UNIVERSITY "ECONOMICS ACADEMY" BRCKO DISTRICT OF BOSNIA AND HERZEGOVINA
 FACULTY OF TECHNICAL SCIENCES
 FIRST CYCLE - UNDERGRADUATE ACADEMIC STUDIES
 Bachelor of Science in Biology and Ecology – 240 ECTS

CURRICULUM

CURRICULUM									
No.	Code	Course Title	Sem.	T	Status	Hours of Active Teaching			ECTS
						L	P	C	
FIRST YEAR									
1.	Z01	Informatics	1		M	2	2	5	5
2.	Z02	Management	1		M	2	2	5	5
3.	Z03	Business English 1	1		M	2	1	5	5
4.	Z04	Business Ethics	1		M	2	1	5	5
5.	Z05	<i>Elective 1</i>	1		E	2	2	5	5
		Machinery in Plant Protection							
		Zoology							
		Introduction to Food Technologies							
		Introduction to Technologies and Materials							
		Systems Biology							
5.	Z06	<i>Elective 2</i>	1		E	2	2	5	5
		Special Entomology							
		Botany							
		Organic Food Production and Processing							
		Formulation Engineering							
		Principles of Molecular and Phonotypic Evolution							
Total:						12	10		30
6.	Z07	Introduction to Economics	2		M	2	2	5	5
7.	Z08	Business Law	2		M	2	2	5	5
8.	Z09	Business English 2	2		M	2	1	5	5
9.	Z10	E-Business	2		M	2	1	5	5
10.	Z11	<i>Elective 3</i>	2		E	2	2	5	5
		Pseudomycoses and Mycoses of Plants							
		Seed Production and Nursery production							
		Hydromechanical Operations							
		Introduction to Chemical Engineering							
		Morphology and Anatomy of Invertebrates							
10.	Z12	<i>Elective 4</i>	2		E	2	2	5	5
		Fundamentals of Pesticide Analysis							
		Physiology of Domestic Animals							
		Food Legislation							
		Material and Energy							
		Anatomy and Morphology of Plants							
Total:						12	10		30
Total Hours in the First Year of Undergraduate Academic Studies						360	300		60
SECOND YEAR									
1.	Z13	Environmental Management	3		M	2	2	5	5
2.	Z14	General Chemistry	3		M	2	2	5	5
3.	Z15	Fundamentals of Cell and Tissue Biology	3		M	2	1	5	5

4.	Z16	Biostatistics	3		M	2	1	5	5
5.	Z17	<i>Elective 5</i>	3		E	2	2	5	5
		Phytonematology							
		General Agriculture							
		Fruit and Vegetable Technology							
		Process and Environmental Engineering							
		Molecular Biology							
10.	Z18	<i>Elective 6</i>	2		E	2	2	5	5
		Plant Protection Technology							
		General Animal Husbandry							
		Quality Control in Technologies of Animal Origin							
		Catalysis and Catalysts							
		Anatomy and Morphology of Chordates							
Total:						12	10		30
6.	Z19	Organic Chemistry	4		M	2	2	5	5
7.	Z20	General Physiology	4		M	2	2	5	5
8.	Z21	Environmental Physics	4		M	2	1	5	5
9.	Z22	Environmental Applications of GIS	4		M	2	1	5	5
10.	Z23	<i>Elective 7</i>	4		E	2	2	5	5
		Diseases of Planting Material							
		General Fruit Growing							
		Meat and Fish Technology							
		Inorganic Technology							
		Basics of Biology and Ecology							
10.	Z14	<i>Elective 8</i>	2		E	2	2	5	5
		Diagnosis of Plant Diseases							
		Special Fruit Growing							
		Technology of Milk and Dairy Products							
		Electrochemical Engineering							
		Biogeography							
Total:						12	10		30
Total Hours in the Second Year of Undergraduate Academic Studies						360	300		60
THIRD YEAR									
1.	Z25	Physiology and Ecophysiology of Animals	5		M	2	3	5	5
2.	Z26	Phytocenology	5		M	2	3	5	5
3.	Z27	Biochemistry	5		M	2	1	5	5
4.	Z28	Introduction to Technology and Materials	5		M	2	2	5	5
5.	Z29	<i>Elective 9</i>	5		E	2	1	5	5
		Plant Protection Products							
		Special Vegetable Growing							
		Laboratory for Quality Control							
		Organic Technology							
		Pedobiology							
10.	Z30	<i>Elective 10</i>	2		E	2	2	5	5
		Bacteriosis of Plants							
		Special Reproduction of Domestic Animals							
		Quality Control of Packaging and Packaging							
		Biofuels							

		Hydroecology							
Total:						12	10		30
6.	Z31	Formulation Engineering	6		M	2	3	2	5
7.	Z32	Numerical Methods in Engineering	6		M	2	3	2	5
8.	Z33	Organic Technology	6		M	2	1	2	5
9.	Z34	Pedology	6		M	2	2	2	5
10.	Z35	<i>Elective 11</i>	6		E	2	1	5	5
		Fundamentals of Pesticide Selectivity and Phytotoxicity							
		Nutrition of Ruminants and Non-ruminants							
		Quality Control and Technology of Confectionery Products							
		Green Engineering							
		Algology							
10.	Z36	<i>Elective 12</i>	2		E	2	2	5	5
		Weed Ecology							
		Plant Breeding							
		Food Toxicology							
		Fundamentals of Safety in Chemical Plants							
		Mycology							
Total:						12	10		30
Total Hours in the Third Year of Undergraduate Academic Studies						360	300		60
FOURTH YEAR									
1.	Z37	Genetics	7		M	2	2	2	5
2.	Z38	Instrumental Methods	7		M	2	1	2	5
3.	Z39	Anatomy and Physiology of Domestic Animals	7		M	2	1	2	5
4.	Z40	Professional Practice 1	7		M	2	4	5	5
5.	Z41	<i>Elective 13</i>	7		E	2	2	5	5
		Plant Viruses							
		Ecological Animal Husbandry							
		Health Food Safety							
		Separation Processes							
		Basic Plant Physiology							
10.	Z12	<i>Elective 14</i>	2		E	2	2	5	5
		Plant bacterioses							
		Production of Vegetables in a Protected Area							
		Bioreaction Systems							
		Material Analysis							
		Animal Physiology							
Total:						12	12		30
6.	Z36	Entomology	8		M	2	2		5
7.	Z37	Cell Biology	8		M	2	1		5
8.	Z38	Parasitology	8		M	2	1		5
9.	Z39	Professional Practice 2	8		M	2	4		5
10.	Z40	<i>Elective 15</i>	8		E	2	2	5	5
		Bacteriosis of Plants							
		Pomology							
		Technology of Flour and Flour Products							
		Recycling and Waste Disposal							
		Physiology of Plant Growth and Development							
10.	Z41	<i>Elective 16</i>	2		E	2	2	5	5
		Pseudomycoses and Plant Mycoses							

		Innovations in Agricultural production							
		Technology of Edible Oils and Fats							
		Process Integration							
		Man and the Environment							
Total:						12	12		30
Total Hours in the Fourth Year of Undergraduate Academic Studies						360	360		60

After passing all the subjects provided for in the curriculum for eight semesters, a student receives a certificate of completion of the study program with 240 ECTS points, namely Bachelor of Science in Biology and Ecology - 240 ECTS.

