

**1. YEAR**

**FALL SEMESTER**

<b>Code</b>	<b>Course Title</b>	<b>C/E</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>ECTS</b>
ECZ 109	Medical Biology and Genetics	Z	2	–	2	3
ECZ 103	General Chemistry I	Z	3	–	3	4
ECZ 105	Physics	Z	2	–	2	3
ECZ 107	Mathematics	Z	3	–	3	3
ECZ 111	Anatomy	Z	3	–	3	4
ECZ 113	History of Pharmacy	Z	2	–	2	2
ECZ 101	Introduction to Pharmacy and Principles	Z	2	–	2	2
TUR 101	Turkish Language I	Z	2	–	2	2
ATA 101	Ataturk's Principles and History of Revolution I	Z	2	–	2	2
ING 101	Basic English	Z	3	–	3	3
ECZS I	Elective Course Out of Field I	S	2	–	2	2
<b>Total</b>			<b>26</b>		<b>26</b>	<b>30</b>

**ELECTIVE COURSE OUT OF FIELD I**

<b>Code</b>	<b>Course Title</b>	<b>C/E</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>ECTS</b>
ECZS 111	Elective Foreign Language (Except English)	S	2	–	2	2
ECZS 113	Vocational English	S	2	–	2	2
ECZS 115	Music	S	2	–	2	2
ECZS 117	Outdoor Sports	S	2	–	2	2
ECZS 119	Painting	S	2	–	2	2

**SPRING SEMESTER**

<b>Code</b>	<b>Course Title</b>	<b>C/E</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>ECTS</b>
ECZ 110	Molecular Biology	Z	2	–	2	3
ECZ 104	General Chemistry II	Z	3	–	3	4

ECZ 108	Biostatistics	Z	2	–	2	3
ECZ 106	Public Health	Z	3	–	3	3
ECZ102	Physiology	Z	3	–	3	4
TUR 102	Turkish Language II	Z	2	–	2	2
ATA 102	Ataturk's Principles and History of Revolution	Z	2	–	2	2
ING 102	Basic English	Z	2	–	2	2
ECZS II	Elective Course Out of Field II	Z	2	–	2	2
ECZS II	Elective Course Out of Field III	Z	3	–	3	3
<b>Total</b>			<b>23</b>		<b>23</b>	<b>30</b>

**ELECTIVE COURSE OUT OF FIELD II**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZS 120	Elective Foreign Language (Except English)	S	2	–	2	2
ECZS 122	Vocational English	S	2	–	2	2
ECZS 124	Football	S	2	–	2	2
ECZS 126	Tennis	S	2	–	2	2
ECZS 128	Gastronomy	S	2	–	2	2

**2. YEAR**

**FALL SEMESTER**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZ 201	Plant Biology		2	–	2	3
ECZ 203	Biochemistry I	Z	2	–	2	3
ECZ 205	Pharmaceutical Microbiology and Immunology	Z	3	–	3	4
ECZ 207	Pharmaceutical Microbiology and Immunology (Practice)	Z	–	4	2	2
ECZ 209	Analytical Chemistry I	Z	3	–	3	3
ECZ 211	Analytical Chemistry I (Practice)	Z	–	4	2	2
ECZ 213	Organic Chemistry I	Z	2	–	2	3

ECZ 215	Bioethics	Z	2	–	2	3
ECZ 217	Pathology	Z	2	–	2	3
ECZS III	Elective Course I	S	2	–	2	2
ECZS III	Elective Course II	S	2	–	2	2
<b>Total</b>			<b>20</b>	<b>8</b>	<b>24</b>	<b>30</b>

#### ELECTIVE COURSE III

Code	Course Title	C/E	T	P	Credits	ECTS
ECZS 231	Communication skills	E	2	–	2	2
ECZS 233	Food Safety and Analysis	E	2	–	2	2
ECZS 235	Laboratory Safety	E	2	–	2	2
ECZS 237	Computer Applications in Medicinal Chemistry	E	2	–	2	2
ECZS 239	Plants of Economic Value	E	2	–	2	2

#### SPRING SEMESTER

Code	Course Title	C/E	T	P	Credits	ECTS
ECZ 202	Pharmaceutical Botany	C	3	–	3	5
ECZ 204	Pharmaceutical Botany (Practice)	C		4	2	2
ECZ 206	Biochemistry II	C	3	–	3	4
ECZ 208	Biochemistry II (Practice)	C	–	4	2	2
ECZ 210	Analytical Chemistry II	C	3	–	3	4
ECZ 212	Analytical Chemistry II (Practice)	C	–	4	2	2
ECZ 214	Organic Chemistry II	C	3	–	3	5
ECZS IV	Elective Course III	E	2	–	2	2
ECZS IV	Elective Course IV	E	2	–	2	2
ECZS IV	Elective Course V	E	2	–	2	2
<b>Total</b>			<b>18</b>	<b>12</b>	<b>24</b>	<b>30</b>

#### ELECTIVE COURSE IV

Code	Course Title	C/E	T	P	Credits	ECTS
ECZS 240	Drug Analysis in Biological Samples	E	2	–	2	2

ECZS 242	Food Microbiology	E	2	–	2	2
ECZS 244	Health Law	E	2	–	2	2
ECZS 246	Drugs and Preparation of Drugs	E	2	–	2	2
ECZS 248	Free Radicals and Antioxidants	E	2	–	2	2

**SUMMER SEMESTER**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZ 290	Internship II ( Pharmacy / Hospital)	C	–	20	–	–

**3.YEAR**

**FALL SEMESTER**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZ 301	Pharmacognosy I	C	2	–	2	3
ECZ 303	Pharmacognosy I (Practice)	C	–	4	2	2
ECZ 305	Pharmaceutical Chemistry I	C	4	–	4	5
ECZ 307	Pharmaceutical Chemistry I (Practice)	C	–	4	2	2
ECZ 309	Pharmaceutical Technology I	C	3	–	3	4
ECZ 311	Pharmaceutical Technology I (Practice)	C	–	4	2	2
ECZ 313	Pharmacology I	C	4	–	4	4
ECZ 315	Clinical Biochemistry	C	1	–	1	2
ECZS V	Elective VI	E	2	–	2	2
ECZS V	Elective VII	E	2	–	2	2
ECZS V	Elective VIII	E	2	–	2	2
<b>Total</b>			<b>20</b>	<b>12</b>	<b>26</b>	<b>30</b>

**ELECTIVE COURSE V**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZS 351	Concepts in Pharmacognosy	E	2	–	2	2
ECZS 353	Cinepharma	E	2	–	2	2
ECZS 355	Biostatistics Applications in Health	E	2	–	2	2
ECZS 357	Evaluation of routine biochemical results	E	2	–	2	2

ECZS 359	Human Sciences in Health	E	2	–	2	2

**SPRING SEMESTER**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZ 302	Pharmacognosy II	C	2	–	2	3
ECZ 304	Pharmacognosy II (Practice)	C	–	4	2	2
ECZ 306	Pharmaceutical Chemistry II	C	3	–	3	5
ECZ 308	Pharmaceutical Chemistry II (Practice)	C	–	4	2	2
ECZ 310	Pharmaceutical Technology II	C	3	–	3	4
ECZ 312	Pharmaceutical Technology II (Practice)	C	–	4	2	2
ECZ 314	Pharmacology II	C	3	–	3	4
ECZ 316	Clinical Pharmacy	C	1	–	1	2
ECZS VI	Elective IX	E	2	–	2	2
ECZS VI	Elective X	E	2	–	2	2
ECZS VI	Elective XI	E	2	–	2	2
<b>Total</b>			<b>18</b>	<b>12</b>	<b>24</b>	<b>30</b>

**ELECTIVE COURSE VI**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZS 360	Cancer Biochemistry	E	2	–	2	2
ECZS 362	Phytopharmacas	E	2	–	2	2
ECZS 364	Biotechnology	E	2	–	2	2
ECZC 366	Measurement Uncertainty and Validation	E	2	–	2	2
ECZC 368	Genetic Factors in Effective Drug Use	E	2	–	2	2

**SUMMER SEMESTER**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZ 390	Internship III (Pharmacy / Hospital)	C		30	–	–

**4. YEAR**

**FALL SEMESTER**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZ 401	Pharmacognosy III	C	2	–	2	3
ECZ 403	Pharmacognosy III (Practice)	C	–	4	2	2
ECZ 405	Pharmaceutical Chemistry III	C	3	–	3	4
ECZ 407	Pharmaceutical Chemistry III (Practice)	C	–	4	2	2
ECZ 409	Pharmaceutical Technology III	C	3	–	3	4
ECZ 411	Pharmaceutical Technology III (Practice)	C	–	4	2	2
ECZ 413	Pharmaceutical Toxicology I	C	2	–	2	3
ECZ 415	Pharmaceutical Toxicology I (Practice)	C	–	2	1	1
ECZ 417	Pharmacology III	C	3	–	3	4
ECZ 419	Family Counselling	C	1	–	1	1
ECZS VII	Elective XII	E	2	–	2	2
ECZS VII	Elective XIII	E	2	–	2	2
<b>Total</b>			<b>18</b>	<b>14</b>	<b>25</b>	<b>30</b>

**ELECTIVE COURSE VII**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZS 471	Hygiene	E	2	–	2	2
ECZS 473	Pharmaceutical active substance design and methods	E	2	–	2	2
ECZS 475	Determination and importance of dissolution rate in the bioavailability, bioequivalence determinations and design of dosage forms	E	2	–	2	2
ECZS 477	Current Approaches in Natural Pharmaceutical Studies	E	2	–	2	2
ECZS 479	Literary Readings	E	2	–	2	2

**SPRING SEMESTER**

Code	Course Title	C/E	T	P	Credits	ECTS
ECZ 402	Pharmaceutical Chemistry IV	C	3	–	3	4
ECZ 404	Pharmaceutical Chemistry IV (Practice)	C	–	4	2	2
ECZ 406	Pharmaceutical Technology IV	C	4	–	4	5
ECZ 408	Pharmaceutical Technology IV (Practice)	C	–	4	2	2
ECZ 410	Pharmaceutical Toxicology II	C	2	–	2	3

ECZ 412	Pharmaceutical Toxicology II (Practice)	C	-	4	2	2
ECZ 414	Pharmacotherapy	C	2	-	2	3
ECZ 416	Basic First Aid	C	2	-	2	2
ECZ 418	Pharmacy Legislation and Management	C	2	-	2	2
ECZ 420	Pharmaceutical and Medical Useful Product Legislation	C	1	-	1	1
ECZS VIII	Elective XIV	E	2	-	2	2
ECZS VIII	Elective XV	E	2	-	2	2
<b>Total</b>			<b>18</b>	<b>13</b>	<b>25</b>	<b>30</b>

#### ELECTIVE COURSE VIII

Code	Course Title	C/E	T	P	Credits	ECTS
ECZS 480	Literature and Literature Search	E	2	-	2	2
ECZS 482	Ethnopharmacy	E	2	-	2	2
ECZS 484	Cosmetics and application areas	E	2	-	2	2
ECZS 486	Isomerization in drug activity	E	2	-	2	2
ECZS 488	Pharmaceutical products of biotechnological origin	E	2	-	2	2

#### SUMMER SEMESTER

Code	Course Title	C/E	T	P	Credits	ECTS
ECZ 490	Internship IV (Pharmacy / Hospital)	C		30	-	-

#### 5. YEAR

#### FALL SEMESTER

Code	Course Title	C/E	T	P	Credits	ECTS
ECZ 501	Research project	C	3	-	3	8
ECZ 503	Research Project (Practice)	C	-	5	5	16
ECZ 505	Clinical Ethics	C	2	-	2	2
ECZ 507	Clinical Pharmacy I (Pharmacy / Pharmaceutical Industry / Hospital Application)	C	-	30	5	4
<b>Total</b>			<b>5</b>	<b>35</b>	<b>15</b>	<b>30</b>

#### SPRING SEMESTER

<b>Code</b>	<b>Course Title</b>	<b>C/E</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>ECTS</b>
ECZ 502	Research project	C	3	–	3	8
ECZ 504	Research Project (Practice)	C	–	5	5	16
ECZ 506	Computer and Technology in Pharmacy	C	2	–	2	2
ECZ 508	Clinical Pharmacy II (Pharmacy / Pharmaceutical Industry / Hospital Application)	C	–	30	5	4
<b>Total</b>			<b>5</b>	<b>35</b>	<b>15</b>	<b>30</b>