



### 1.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
BiO 115	BIOLOGY	3+0+0	Compulsory	4
ECZ 1021	PHARMACEUTICAL GENERAL CHEMISTRY	3+0+0	Compulsory	4
ECZ 1111	ORIENTATION TO PHARMACY	1+0+0	Compulsory	2
ECZ 1121	LABORATORY SAFETY	2+0+0	Compulsory	3
ECZ 1211	BEHAVIOURAL SCIENCES	1+0+0	Compulsory	2
ENF 101	INFORMATION AND COMMUNICATION TECHNOLOGY	2+0+0	Compulsory	3
ENG-101	ENGLISH 1	4+0+0	Compulsory	2
FİZ 113	PHYSICS	2+0+0	Compulsory	3
MAT 107	MATHEMATICS	2+0+0	Compulsory	3
TAR-101	ATATURK PRINCIPLES AND HISTORY OF REVOLUTION I	2+0+0	Compulsory	2
TÜR-101	TURKISH LANGUAGE I	2+0+0	Compulsory	2
<b>Total ECTS</b>				<b>30</b>

### 2.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ANA 108	ANATOMY	2+0+0	Compulsory	4
ECZ 1012	PHARMACEUTICAL MICROBIOLOGY	3+0+0	Compulsory	5
ECZ 1042	FARMASÖTİK BİYOKİMYA I	2+0+0	Compulsory	2
ECZ 1062	PHARMACEUTICAL ORGANIC CHEMISTRY I	2+0+0	Compulsory	4
ECZ 1132	INTERNSHIP STUDY	1+0+0	Compulsory	2
ECZ 1142	CAREER PLANNING IN PHARMACY	2+0+0	Compulsory	2
ECZ 1912	PHARMACEUTICAL MICROBIOLOGY LABORATORY	0+3+0	Compulsory	2
ENG-102	ENGLISH 2	4+0+0	Compulsory	2
IST 162	BIOSTATISTICS	2+0+0	Compulsory	3
TAR-102	ATATURK PRINCIPLES AND HISTORY OF REVOLUTION II	2+0+0	Compulsory	2
TUR-102	TURKISH LANGUAGE II	2+0+0	Compulsory	2
<b>Total ECTS</b>				<b>30</b>

### 3.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ECZ 2021	PHARMACEUTICAL ANALYTICAL CHEMISTRY I	3+0+0	Compulsory	4
ECZ 2051	IMMUNOLOGY	1+0+0	Compulsory	3
ECZ 2061	PHARMACEUTICAL ORGANIC CHEMISTRY II	2+0+0	Compulsory	4
ECZ 2921	PHARMACEUTICAL ANALYTICAL CHEMISTRY I LABORATORY	0+3+0	Compulsory	2
ENG-201	ENGLISH 3	4+0+0	Compulsory	2
FZY 213	PHYSIOLOGY	3+0+0	Compulsory	3
HEM 215	FIRST AID	2+0+0	Compulsory	2
HS 101	PUBLIC HEALTH	2+0+0	Compulsory	2
PAT 203	PATHOLOGY	2+0+0	Compulsory	3
MOS2G	NON-PROFESSIONAL ELECTIVE COURSE-2G	-	Elective	3
<b>Total ECTS</b>				<b>28</b>

ECZ 2023	PHILOSOPHY OF SCIENCE	3+0+0	Elective	3
ECZ 2033	PUBLIC RELATIONS	3+0+0	Elective	3
ECZ 2043	INTRODUCTION TO HISTORY OF CHEMISTRY	3+0+0	Elective	3
ECZ 2053	PSYCHOLOGY	3+0+0	Elective	3
ECZ 2063	SOCIAL STUDIES	3+0+0	Elective	3
ECZ 2073	EFFECTIVE COMMUNICATION, DICTION AND BODY LANGUAGE	3+0+0	Elective	3

### 4.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ECZ 2022	PHARMACEUTICAL ANALYTICAL CHEMISTRY II	2+0+0	Compulsory	5
ECZ 2032	FOOD ANALYSIS	2+0+0	Compulsory	4
ECZ 2052	PHARMACEUTICAL BOTANY	2+0+0	Compulsory	5
ECZ 2062	PHARMACEUTICAL BIOCHEMISTRY II	2+0+0	Compulsory	5
ECZ 2922	ANALYTICAL CHEMISTRY II LABORATORY	0+3+0	Compulsory	2
ECZ 2932	FOOD ANALYSIS LABORATORY	0+2+0	Compulsory	2
ECZ 2942	PHARMACEUTICAL BIOCHEMISTRY LABORATORY	0+3+0	Compulsory	2
ECZ 2952	PHARMACEUTICAL BOTANY LABORATORY	0+3+0	Compulsory	2
ENG-202	ENGLISH 4	4+0+0	Compulsory	2
MOS2B	NON-PROFESSIONAL ELECTIVE COURSE-2B	-	Elective	3
<b>Total ECTS</b>				<b>32</b>

ECZ 2074	ECONOMICS	3+0+0	Elective	3
ECZ 2084	HISTORY OF SCIENCE	3+0+0	Elective	3
ECZ 2094	EVOLUTION	3+0+0	Elective	3
ECZ 2114	SIGN LANGUAGE TRAINING FOR PEOPLE WITH HEARING LOS	3+0+0	Elective	3
ECZ 2124	SUBSTANCE ABUSE	3+0+0	Elective	3
ECZ 2134	EDUCATIONAL AND SOCIAL PROBLEMS	3+0+0	Elective	3
ECZ 2144	SOCIAL RESPONSIBILITY AWARENESS AND PRACTICES	3+0+0	Elective	3
ECZ 2154	MACROFUNGI	3+0+0	Elective	3

#### 5.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ECZ 3051	PHARMACOGNOSY I	2+0+0	Compulsory	3
ECZ 3061	PHARMACEUTICAL CHEMISTRY I	3+0+0	Compulsory	4
ECZ 3071	PHARMACEUTICAL TECHNOLOGY I	3+0+0	Compulsory	5
ECZ 3131	INTERNSHIP I	0+0+0	Compulsory	2
ECZ 3141	PHARMACOLOGY I	3+0+0	Compulsory	4
ECZ 3951	PHARMACOGNOSY I LABORATORY	0+3+0	Compulsory	2
ECZ 3961	PHARMACEUTICAL CHEMISTRY I LABORATORY	0+3+0	Compulsory	2
ECZ 3971	PHARMACEUTICAL TECHNOLOGY I LABORATORY	0+3+0	Compulsory	2
ENG-301	ENGLISH 5	4+0+0	Compulsory	3
MS3G	PROFESSIONAL ELECTIVE COURSE-3G	-	Elective	3

**Total ECTS 30**

ECZ 3115	POISONS AND VENOMS OF VEGETABLE AND ANIMAL ORIGIN	2+0+0	Elective	3
ECZ 3125	PREBIOTICS AND PROBIOTICS	2+0+0	Elective	3
ECZ 3135	BASIC PRINCIPLES OF PHARMACEUTICAL DRUG PREPARATION	2+0+0	Elective	3
ECZ 3155	FOOD ADDITIVES	2+0+0	Elective	3
ECZ 3165	CHROMATOGRAPHIC SEPARATION METHODS	2+0+0	Elective	3
ECZ 3185	PURPOSE OF RADIOPHARMACEUTICAL DRUG APPLICATIONS	2+0+0	Elective	3
ECZ 3195	FREE RADICAL ANTIOXIDANT DEFENCE SYSTEMS	2+0+0	Elective	3
ECZ 3205	PRODUCTION AND ANALYSIS OF NATURAL PRODUCTS	2+0+0	Elective	3

#### 6.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ECZ 3042	CLINICAL BIOCHEMISTRY	2+0+0	Compulsory	3
ECZ 3052	PHARMACOGNOSY II	2+0+0	Compulsory	3
ECZ 3062	PHARMACEUTICAL CHEMISTRY II	3+0+0	Compulsory	4
ECZ 3072	PHARMACEUTICAL TECHNOLOGY II	3+0+0	Compulsory	4
ECZ 3142	PHARMACOLOGY II	3+0+0	Compulsory	4
ECZ 3952	PHARMACOGNOSY II LABORATORY	0+3+0	Compulsory	2
ECZ 3962	PHARMACEUTICAL CHEMISTRY II LABORATORY	0+3+0	Compulsory	2
ECZ 3972	PHARMACEUTICAL TECHNOLOGY II LABORATORY	0+3+0	Compulsory	2
ENG-302	ENGLISH 6	4+0+0	Compulsory	3
MS3B	PROFESSIONAL ELECTIVE COURSE-3B	-	Elective	3

**Total ECTS 30**

ECZ 3206	GENETICS OF BACTERIA	2+0+0	Elective	3
ECZ 3216	NATURAL COSMETICS	2+0+0	Elective	3
ECZ 3226	QUALITY CONTROL TO DRUG AND ANALYSIS OF PHARMACEUT	2+0+0	Elective	3
ECZ 3246	RADIOPHARMACEUTICAL PREPARATIONS	2+0+0	Elective	3
ECZ 3256	OTC DRUGS	2+0+0	Elective	3
ECZ 3266	SPECTROCHEMICAL ANALYSIS METHODS	2+0+0	Elective	3
ECZ 3276	PHARMACEUTICAL AUXILIARY SUBSTANCES	2+0+0	Elective	3
ECZ 3286	FOODBORNE DISEASES	2+0+0	Elective	3
ECZ 3296	NATURAL DRUG ADDITIVES	2+0+0	Elective	3

#### 7.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ECZ 4051	PHARMACOGNOSY III	2+0+0	Compulsory	2
ECZ 4061	PHARMACEUTICAL CHEMISTRY III	2+0+0	Compulsory	2
ECZ 4071	PHARMACEUTICAL TECHNOLOGY III	3+0+0	Compulsory	3
ECZ 4081	PHARMACEUTICAL TOXICOLOGY	3+0+0	Compulsory	3
ECZ 4131	INTERNSHIP II	0+0+0	Compulsory	1
ECZ 4141	PHARMACOLOGY III	3+0+0	Compulsory	3
ECZ 4151	COSMETOLOGY	2+0+0	Compulsory	2
ECZ 4951	PHARMACOGNOSY III LABORATORY	0+3+0	Compulsory	2
ECZ 4961	PHARMACEUTICAL CHEMISTRY III LABORATORY	0+3+0	Compulsory	2
ECZ 4971	PHARMACEUTICAL TECHNOLOGY III LABORATORY	0+3+0	Compulsory	2
ECZ 4981	PHARMACEUTICAL TOXICOLOGY LABORATORY	0+3+0	Compulsory	2

ENG-401	ENGLISH-7	4+0+0	Compulsory	3
MS4G	PROFESSIONAL ELECTIVE COURSE-4G	-	Elective	3
			<b>Total ECTS</b>	<b>30</b>
ECZ 4277	HERBAL MEDICINES IN TURKEY AND WORLD MARKET, PRODU	2+0+0	Elective	3
ECZ 4287	EVALUATION OF BIOCHEMICAL LAB RESULTS	2+0+0	Elective	3
ECZ 4297	NATURAL ANTICANCER COMPOUNDS	2+0+0	Elective	3
ECZ 4307	PHARMACOBIO TECHNOLOGY	2+0+0	Elective	3
ECZ 4317	DRUG RESEARCH AND DEVELOPMENT	2+0+0	Elective	3
ECZ 4327	MODERN SYNTHETIC METHODS IN DRUG INDUSTRY	2+0+0	Elective	3
ECZ 4337	PARASITOLOGY AND VIROLOGY	2+0+0	Elective	3
ECZ 4347	DESIGN AND FORMULATION DEVELOPMENT OF DRUGS USED I	2+0+0	Elective	3
ECZ 4357	CELLULAR AND MOLECULAR BASIS OF DRUG EFFECT	2+0+0	Elective	3
ECZ 4367	PHYTOCHEMICAL SEPARATION TECHNIQUES	2+0+0	Elective	3
ECZ 4377	EFFECTS OF DRUGS ON BIOCHEMICAL PARAMETERS	2+0+0	Elective	3

8.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ECZ 4052	PHYTOPHARMACY AND PHYTOTHERAPEUTICS	2+0+0	Compulsory	2
ECZ 4062	PHARMACEUTICAL CHEMISTRY IV	2+0+0	Compulsory	3
ECZ 4072	PHARMACEUTICAL TECHNOLOGY IV	3+0+0	Compulsory	3
ECZ 4092	GRADUATION PROJECT I	2+0+0	Compulsory	1
ECZ 4162	BIOPHARMACEUTICS AND PHARMACOKINETICS	2+0+0	Compulsory	2
ECZ 4172	HISTORY OF PHARMACY AND DEONTOLOGY	2+0+0	Compulsory	2
ECZ 4182	PHARMACY REGULATIONS AND MANAGEMENT	2+0+0	Compulsory	2
ECZ 4192	PHARMACOTHERAPY	2+0+0	Compulsory	2
ECZ 4202	PHARMACEUTICAL CARE	2+0+0	Compulsory	2
ECZ 4962	PHARMACEUTICAL CHEMISTRY IV LABORATORY	0+3+0	Compulsory	2
ECZ 4972	PHARMACEUTICAL TECHNOLOGY IV LABORATORY	0+3+0	Compulsory	2
ECZ 4992	GRADUATION PROJECT I LABORATORY	0+2+0	Compulsory	1
ENG-402	ENGLISH 8	4+0+0	Compulsory	3
MS4B	PROFESSIONAL ELECTIVE COURSE-4B	-	Elective	3
			<b>Total ECTS</b>	<b>30</b>

ECZ 4358	DESIGN OF HERBAL DRUGS	2+0+0	Elective	3
ECZ 4368	FORMULATION OF BIOTECHNOLOGICAL PRODUCTS AND REGUL	2+0+0	Elective	3
ECZ 4388	GOOD MANUFACTURING AND GOOD LABORATORY PRACTICE IN	2+0+0	Elective	3
ECZ 4408	COSMETIC PREPARATIONS AND TOXICITY RISKS	2+0+0	Elective	3
ECZ 4418	CHRONOTHERAPY	2+0+0	Elective	3
ECZ 4428	EFFECT OF MOLECULAR STRUCTURE ON BIOAVAILABILITY	2+0+0	Elective	3
ECZ 4438	PHARMACEUTICAL NANOTECHNOLOGY AND MODERN DRUG CARR	2+0+0	Elective	3
ECZ 4448	TRADITIONAL TREATMENT SYSTEMS	2+0+0	Elective	3
ECZ 4458	NUTRACEUTICS	2+0+0	Elective	3
ECZ 4468	CLINICAL TOXICOLOGY	2+0+0	Elective	3
ECZ 4478	RECENT CAREER ADVANCES IN TOXICOLOGY	2+0+0	Elective	3

9.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ECZ 5091	GRADUATION PROJECT II	2+0+0	Compulsory	3
ECZ 5131	INTERNSHIP III	0+0+0	Compulsory	2
ECZ 5991	GRADUATION PROJECT II LABORATORY	0+6+0	Compulsory	5
MS5G	PROFESSIONAL ELECTIVE COURSE 5G	-	Elective	20
			<b>Total ECTS</b>	<b>30</b>

ECZ 5439	RATIONAL DRUG USE	2+0+0	Elective	4
ECZ 5449	ENVIRONMENTAL HEALTH	2+0+0	Elective	4
ECZ 5459	NATURAL FOOD SUPPLEMENTS	2+0+0	Elective	4
ECZ 5469	COMPUTER APPLICATION IN PHARMACY AND REIMBURSEMENT	2+0+0	Elective	4
ECZ 5479	ACCOUNTING IN PHARMACY	2+0+0	Elective	4
ECZ 5489	NEW TRENDS IN COSMETIC PRODUCTS	2+0+0	Elective	4
ECZ 5499	PHYTOTHERAPOTICS-DRUG INTERACTIONS	2+0+0	Elective	4
ECZ 5509	INFECTION DISEASE, DISEASE PREVENTION AND HYGENE	2+0+0	Elective	4
ECZ 5519	PHARMACOECONOMY	2+0+0	Elective	4
ECZ 5529	DRUG SAFETY AND PHARMACOVIGILANCE	2+0+0	Elective	4
ECZ 5539	STABILITY IN THE DRUG PRODUCTION AND REGULATORY AF	2+0+0	Elective	4
ECZ 5549	DRUG-DRUG INTERACTIONS	2+0+0	Elective	4
ECZ 5559	DRUG INFORMATION	2+0+0	Elective	4
ECZ 5569	ADDITION OF DRUS TO LARGE VOLUME PARENTERALS AND D	2+0+0	Elective	4
ECZ 5579	CLINICAL PHARMACOKINETICS AND BIOPHARMACEUTICAL CA	2+0+0	Elective	4
ECZ 5599	MEDICAL DEVICES	2+0+0	Elective	4

ECZ 5609	QUALITY SYSTEMS IN ANALYTICAL LABORATORIES IN PHAR	2+0+0	Elective	4
ECZ 5619	BIOTECHNOLOGY	2+0+0	Elective	4
ECZ 5629	CONTROLLED RELEASE AND NOVEL DRUG DELIVERY SYSTEMS	2+0+0	Elective	4
ECZ 5649	QUALITY ASSURANCE AND VALIDATION IN PHARMACEUTICAL	2+0+0	Elective	4
ECZ 5659	R&D AND SCALE UP IN THE DRUG MANUFACTURING ON INDU	2+0+0	Elective	4
ECZ 5669	RESEARCH AND DEVELOPMENT STRATEGIES OF ACTIVE INGR	2+0+0	Elective	4
ECZ 5679	ROLE OF DRUG METABOLISM IN DRUG DISCOVERY AND DEVELOP	2+0+0	Elective	4
ECZ 5689	DRUG REGISTRATION AND PATENT	2+0+0	Elective	4
ECZ 5699	PHARMACEUTICAL AND PROFESSIONAL ENTREPRENEURSHIP	2+0+0	Elective	4
ECZ 5709	ANALYSIS METHODS OF DRUG ACTIVE SUBSTANCES BASED O	2+0+0	Elective	4
ECZ 5799	MEDICINAL TEAS	2+0+0	Elective	4
ECZ 5809	PHARMACY IN SPORT	2+0+0	Elective	4
ECZ 5819	OCCUPATIONAL HEALTH AND SAFETY IN PHARMACY PRACTIC	2+0+0	Elective	4
ECZ 5829	HERBAL DRUG PRODUCTION AND QUALITY CRITERIA	2+0+0	Elective	4
ECZ 5839	ARTIFICIAL INTELLIGENCE IN PHARMACY	2+0+0	Elective	4
ECZ 5849	SAFE DRUG USE IN GERIATRIC, PEDIATRIC PATIENTS, PREGNANCY	2+0+0	Elective	4

#### 10.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ECZ 5132	INTERNSHIP IV	0+30+0	Compulsory	30
			<b>Total ECTS</b>	<b>30</b>

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