

VOCATIONAL SCHOOL OF HEALTH SERVICES

PHARMACY SERVICES PROGRAM

2022-2023

CLASS 1 FALL

SEMESTER I

FAR105 BASIC PHARMACOLOGY

- 1- Introduction to Pharmacology and Basic Concepts
- 2- Introduction to Pharmacology and Basic Concepts
- 3- Pharmacokinetics
- 4- Pharmacodynamics
- 5- Central Nervous System Drugs
- 6- Central Nervous System Drugs –
- 7- General Repetition
- 8- Autonomic Nervous System Drugs
- 9- Cardiovascular System Drugs
- 10- Anti-inflammatories
- 11- Anesthetics
- 12- Respiratory System Drugs
- 13- Rational Use of Medicines
- 14- General Repetition

MIK101 BASIC MICROBIOLOGY

- 1- Introduction to Medical Microbiology
- 2- Medical Bacteriology and Morphological Characteristics of Bacteria
- 3- Bacterial Metabolism and Reproduction
- 4- Bacterial Genetics
- 5- Bacterial Virulence Factors
- 6- Antimicrobial Substances
- 7- Medical Bacteriology
- 8- Medical Virology

- 9- Medical Parasitology
- 10- Medical Mycology
- 11- Relationships Between Microorganisms and Microorganism Human Relationship
- 12- Sterilization, Disinfection and Antisepsis
- 13- Basic Immunology
- 14- General Principles of Laboratory Diagnosis

ECZ113 MEDICAL HERBAL PRODUCTS

- 1- Naming plants, parts of plants used as drugs, naming drugs
- 2- Macroscopic, microscopic, physical, chemical, chromatographic methods in the diagnosis and determination of medicinal plants, morphological (according to external appearance) diagnosis of drugs
- 3- Active ingredients of medicinal plants, Glycosides, Organic acids, Tannins, Alkaloids, Fixed oils, Essential oils (essentials), Resinous compounds, Vitamins, Antibiotics
- 4- Preparation of phytotherapy and herbal products, herbal products obtained by extraction method, herbal products obtained by distillation method
- 5- Usage and dosage forms of herbal drugs, powder (pulveres), pill (pilulae), infusion (infusa), decoction (decocta), ointment (unguenta), medicinal oil (olea medicata), scented oil (olea aromatica), tincture (tincturae), extract (Extracta)
- 6- Important plants used in the preparation of herbal drugs in Turkey: black cumin, datura, laurel, basil, belladonna,
- 7- Midterm exam
- 8- Important plants used in the preparation of herbal drugs in Turkey: poppy, marshmallow flower, linden, caper, thyme, hemp
- 9- Important plants used in the preparation of herbal drugs in Turkey: cumin, coriander, lavender, mint, lemon balm, chamomile
- 10- Plant supply suitable for herbal teas, herbal tea varieties, herbal tea preparation, diseases in which herbal teas are used
- 11- Collection techniques applied to medicinal and aromatic plants
- 12- Post-collection processes applied to drugs, first post-harvest processes, drying and drying methods, drying at atmospheric pressure, natural and artificial methods, types, vacuum drying, lyophilization, microwave drying, features to be considered in drying.
- 13- Storage conditions of medicinal and aromatic plants, possible situations in storage methods, physical chemical factors and decontamination methods against living factors

MYO101 BASIC ANATOMY AND PHYSIOLOGY

1-Introduction to Anatomy and Physiology and short terminology, Axes, planes, Terms indicating location and direction; general information

2-Cell Theory, Structural features, Cell organelles, Cell division; Information on the provision of substance exchange

3-Locomotor System Anatomy and Physiology- Osteology

4-Locomotor System; arthrology; General information, joint types, movements. myology; Anatomy, Contraction mechanism, Striated muscles, cardiac muscle, physiology of smooth muscles.

5-Respiratory system Anatomy and Physiology. Nose, Paranasal sinuses, Larynx, trachea, Lungs. Physiology of Respiratory, ventilation, diffusion, Perfusion, Respiratory Regulation.

6-Cardiocirculatory system Anatomy and Physiology. Blood: functions, components, formed elements of blood, Blood groups. Metabolism of the heart, heart sounds. Heart cavities, Veins.

7-Digestive system Anatomy and Physiology I. Oral anatomy, Chewing muscles, Pharynx, Oesophagus, Stomach, Small-large intestines, Kc. Gallbladder, Pancreas, Digestive glands.

8-Digestive System II. Digestion in the mouth, stomach, digestion in the small and large intestines. KC. functions, CHO digestion, Digestion of fat-proteins. Vitamin-Mineral-Electrolyte functions.

9-Urinary System Anatomy and Physiology. Function of kidneys, nephron, urin formation, fluid-electrolyte balance. Distribution of water in the organism, Electrolytes-acid-base balance. Renin-angiotensin system.

10-Genital organs-reproductive physiology. Female and male genital organs. Hormonal control of the reproductive system, hypothalamus, pituitary, gonadotropic hormones. Ovarian hormones, reproductive cycle.

11-Endocrine system anatomy and physiology. Endocrine glands, their functions. Physiological functions of hormones, classification. Hormones and target cells.

12-Nervous system Anatomy and Physiology. Development of nervous tissue, neuron types, functions, synapse, neuroglia cells. FAQ and PSS

13-Sensory organs, Anatomy and Physiology. Ways of seeing, ways of hearing and balance.

RPSI209 POSITIVE PSYCHOLOGY AND COMMUNICATION SKILLS (HSE)

1-Definition of Positive Psychology and Learning the Basic Concepts

2 -Learning The Theoretical Fundamentals Of Positive Psychology

3 -Learning the Brain Infrastructure of Social Behaviors

4 -Emotional Intelligence, Emotional Intelligence in Adults, Children and Youth, Marriage and Business Life, Principles of Emotional Intelligence, Learning the Relationship of Emotional Intelligence with Personality Development, Marriage and Business Life

5 -Learning the Concepts Related to Self-Knowledge and Awareness

6 - Recognizing Others and Learning the Concepts of Empathy

7 -Learning Communication Skills

8 -Learning Motivation and Planning Skills

9 -Learning Problem Solving Skills

10-Learning Anger Control Skills

11 -Learning Relationship Management Skills

12 -Learning the Concept of Persistence and Impulse Control Skills

13 -Learning Healthy Decision Making Skills

14 -Learning the Concepts of Compromise

TURK101 TURKISH LANGUAGE I

1-Learns the necessity of the connection between language and culture.

2- Gain knowledge about the historical course of the Turkish Language.

3-Learns the rules of spelling and punctuation, its necessity and its contribution to success in life.

4-Learns the use of words in the most appropriate place in oral and written expression.

5-Learns to use his ideas and feelings correctly and effectively.

INGU101 ENGLISH I

1-to meet, verb to be, subject pronouns

2- Demonstrative pronouns, countable/uncountable nouns, quantitative expressions

3- Simple present tense, adverbs of frequency

4-Object pronouns, possessive adjectives, have got/has got

5--must,-must,(must/mustn t)-can,-can(can/can t)

6-Past Tense (Simple Past Tense)

7 - Understands what he/she listens at the relevant level and makes comments.

8-Increases vocabulary with various reading passages.

9-Present tense

10-Conjunctions (and-but-that's why-because)

11-Comparisons

12-Gains the ability to understand various English reading passages at intermediate level.

ATA101 PRINCIPLES OF ATATURK AND HISTORY OF REVOLUTION I

1-Concepts, definitions, lesson methods and definitions of resources

2-Industrial Revolution and the French Revolution

3-Disintegration of the Ottoman Empire (XIX. Century)

4-Tanzimat and Reform Edict, I. and II. Constitutionalism

5-I. World, Tripoli and Balkan Wars

6-Mondros Armistice Agreement, Wilson Principles, Paris Conference

7-M. Kemal's Departure to Samsun and the Situation in Anatolia

8-Amasya Circular, National Congresses, Opening of the Parliamentary Assembly

9-The Establishment of the Parliament and Internal Revolts

10-Teskilat-ı Esasi Law, Establishment of the Regular Army

11-I. II. Great Offensive with İnönü, Kütahya-Eskişehir and Sakarya Pitched Battles

12-The treaties during the War of Independence

13- Lausanne Peace Treaty

14-Abolishing the Sultanate

RKUL101 UNIVERSITY CULTURE I* (ÜSEC)

Each semester includes seminars, conferences, panels, workshops and talks to be held for 14 weeks within the framework of a program consisting of suggestions from academic units, student council and student clubs at the university.

1ST CLASS

SEMESTER II

ECZ110 DRUG INFORMATION IN PHARMACY SERVICES I

1- Pharmaceutical forms specific to drug administration routes

2- Analgesics

3- Preparations effective on the autonomic nervous system

- 4- Preparations effective on the central nervous system
- 5- Preparations acting on the central nervous system
- 6- Anesthetics
- 7- General Repetition
- 8- Preparations effective on the cardiovascular system
- 9- Drug abuse and addiction today
- 10- Respiratory System Preparations
- 11- Gastrointestinal System Preparations
- 12- Autoacoids and Preparations Effective on the Endocrine System
- 13- Chemotherapeutics
- 14- General Repetition

BIK BIOCHEMISTRY

- 1- Subject of biochemistry, biomolecules and cell structure
- 2- Properties of water and aqueous solutions
- 3- Amino acids, peptides and proteins
- 4- Amino acids, peptides and proteins
- 5- Enzymes, enzyme kinetics, enzyme inhibition and regulation of enzyme activity
- 6- Enzymes, enzyme kinetics, enzyme inhibition and regulation of enzyme activity
- 7- Enzymes, enzyme kinetics, enzyme inhibition and regulation of enzyme activity
- 8- Carbohydrates
- 9- proteins
- 10- proteins
- 11- Lipids and biological membranes
- 12- Lipids and biological membranes
- 13- Nucleic acids
- 14- Vitamins

ECZ114 DISEASES INFORMATION

- 1- Definitions of Health and Disease, Basic Concepts
- 2- Respiratory System Diseases
- 3- Heart and Circulatory System Diseases 1
- 4- Heart and Circulatory System Diseases 2
- 5- Blood Diseases
- 6- Digestive System Diseases
- 7- Urinary System Diseases
- 8- Nervous System Diseases
- 9- Movement System Diseases
- 10- Skin Diseases
- 11- Endocrine System Diseases
- 12- Infectious Diseases 1
- 13- Infectious Diseases 2
- 14- General Repetition

ECZ108 DRUG FORM TECHNOLOGY

- 1- Introduction to Drug Forms
- 2- Drug Administration Routes
- 3- Liquid Medicine Forms-I
- 4- Liquid Medicine Forms-II
- 5- Semi-Solid Drug Forms-I
- 6- Semi-solid Drug Forms-II
- 7- General Repeatation
- 8- Semi-solid Drug Forms-III
- 9- Solid Drug Forms-I
- 10- Solid Drug Forms-II
- 11- Aerosols
- 12- Oral Contraceptives and Birth Control Methods
- 13- Abbreviations and Example Magistral Formulations

14- General Repeat

FIRST 101 FIRST AID

- 1-To apply the basic principles of first aid
- 2-To learn about the human body
- 3-Assess the patient/injured and the scene
- 4-To provide basic life support
- 5-To apply first aid in respiratory tract obstructions
- 6-To apply first aid in bleeding, shock, injuries
- 7-To apply first aid in burns, frostbite and heat stroke
- 8-To apply first aid in unconsciousness
- 9-To apply first aid in poisonings
- 10-To apply first aid in animal bites
- 11-To apply first aid in case of foreign body getting into eyes, ears and nose.
- 12-To apply first aid in choking
- 13-To apply first aid in fractures, dislocations and sprains
- 14-Carrying the sick and injured

INGU102 ENGLISH II

- 1- Gain the ability to understand various English reading passages at lower intermediate level.
- 2-Increases vocabulary with various reading passages
- 3- Understands what he/she listens to at the relevant level and makes comments.

TURK102 TURKISH LANGUAGE II

- 1-Learns the necessity of language and culture connection
- 2- Have information about the historical course of the Turkish language.
- 3-Learns the rules of spelling and punctuation, its necessity and its contribution to success in life.
- 4-Learns the use of words in the most appropriate place in oral and written expression
- 5-Learns to use ideas and feelings correctly and effectively.

ATA102 ATATURK'S PRINCIPLES AND HISTORY OF REVOLUTION II

- 1-To know the sources related to Atatürk's principles
- 2- By getting down to the roots of the Turkish revolution, he consciously owns Atatürk's reforms.
- 3- Having a consciousness that recognizes his country, homeland and nation and produces policies suitable for them

RKUL 102 UNIVERSITY CULTURE II*(ÜSEC)

- 1-Improves general cultural knowledge
- 2-Uses critical thinking, questioning and research skills
- 3-Develops alternative solutions for different problems
- 4-Understand the importance and meaning of lifelong learning
- 5-Transfers the knowledge gained from different disciplines to his/her life

2. CLASS

III. SEMESTER

ECZ219 DRUG INFORMATION IN PHARMACY SERVICES II

- 1- Drugs affecting the central nervous system I
- 2- Drugs affecting the central nervous system II
- 3- Drugs used in the treatment of pain and inflammation
- 4- Drugs that affect the endocrine system
- 5- Drugs that affect the reproductive system
- 6- Urinary system drugs
- 7- General Repetition
- 8- Ear, nose and oropharynx drugs
- 9- Eye and skin medications
- 10- Vitamins
- 11- Vaccines
- 12- Intravenous add-ons
- 13- Support products used in wound care and other conditions
- 14- General Repetition

ECZ215 MEDICAL PRODUCTS

- 1- Professional definition and historical development of medical devices and medical products, their situation in our country, application areas, purpose and necessity
- 2- General medical supplies
- 3- Wound and patient care products
- 4- Diagnostic products, glucometers, blood pressure monitors, stethoscopes and thermometers
- 5- Inspection tools and equipment, Personal care tools and equipment
- 6- Medical equipment used in the hospital
- 7- General Repetition
- 8- Oral and dental health products, equipment used in dentistry
- 9- Medical equipment used in physical therapy, Walking tools and equipment
- 10- Orthopedic products
- 11- First aid supplies and work safety materials
- 12- Mother and baby health and sterilization disinfection products
- 13- Products used in obstetrics, internal medicine, pediatrics, respiratory dialysis and surgery
- 14- General Repetition

ECZ205 PRESCRIPTION INFORMATION

- 1- Types of Prescriptions .
- 2- Diagnosis and abbreviations found in prescriptions .
- 3- Prescription Processes .
- 4- Prescription Processes .
- 5- Diagnosis and Abbreviations used in prescriptions .
- 6- Sales of OTC Products .
- 7- General Repetition
- 8- Rational Drug Use .
- 9- Cold Chain
- 10- SUT Applications .
- 11- Sales of Food Supplements in Pharmacies .
- 12- Majistral Drug Preparation Techniques .
- 13- Majistral Drug Preparation Techniques .

14- Mandatory Medicines in Pharmacies .

15- General Repetition

ECZ217 BASIC PHARMACEUTICAL PRACTICES

Making practical applications for the profession in community pharmacies and hospital pharmacies.

Field Application

MYO015 SOCIAL RESPONSIBILITY PROJECT

1-What is Social Responsibility? What is the purpose of social responsibility? Why social responsibility studies are important, creation of social responsibility project, what are corporate social responsibility studies?

2-Determining the project

3-Preparation of the presentation covering the determined project subject, project purpose and project team

4-Presentation by students of what has been done for the project so far

5-Field Study-Application

6-Evaluation

*Applied Lesson

2. CLASS

IV. SEMESTER

MET 101 PROFESSIONAL ETHICS (HSE)

1- Examining the concepts of ethics and morality

2- Examining the concepts of ethics and morality

3-Ethics systems

4-Ethical Principles

5-Ethical Dilemma

6-Professional Ethics

7- Professional Corruption

8-Ethical and Unethical Behaviors in Business Life

9-Professional Confidentiality

10-Patient Rights

- 11-Informed Consent
- 12-Ethics in the Public
- 13-Social Responsibility

ECZ217 BASIC PHARMACEUTICAL PRACTICES

Making practical applications for the profession in community pharmacies and hospital pharmacies.

Field Application

ECZ214 TOXICOLOGY

- 1- Introduction to toxicology and definitions of basic concepts
- 2- Toxic effect, Toxicity tests, Main mechanisms of toxic effect
- 3- Factors affecting toxicity
- 4- Classification of toxic effect
- 5- Pharmacovigilance . .
- 6- Basic principles of acute poisoning treatment
- 7- Midterm Exam
- 8- Drug toxicity
- 9- Forensic Toxicology . .
- 10- Toxicological results of drug-food, drug-alcohol and drug-herbal product interactions
- 11- Drug use in pregnant and lactating women
- 12- Drug use in the elderly
- 13- Drug use in patients with organ failure
- 14- General Repetition

ECZ216 BASIC CALCULATIONS IN PHARMACY

- 1- Measurement systems – I
- 2- Measurement systems – II
- 3- Expressions of concentration – I / Basic Concepts
- 4- Expressions of concentration – II / Applications
- 5- Resolution check – I / Basic Concepts
- 6- Resolution check – II / Applications
- 7- General repetition

8- Measuring tools, their properties and use

9- Dilutions

10- Alcohol dilution

11- Dose calculations

12- Calculation Examples

13- Practical calculations

14- General repetition

ECZ218 PHARMACEUTICAL REGISTRATIONS AND STOCKING METHODS

1- Stock description and records kept in the pharmacy

2- Stock Systems and End of Period Inventory Valuation

3- Routinely kept books and records in the pharmacy

4- What is stock?, definition, importance, benefits of stock control,

5- Factors determining the amount of stock in enterprises, Selection technique of stock control

6- ABC method, Control of stocks according to their functions, Stock systems

7- General Repetition

8- Explanation of costs with a mathematical model, models against stockout expenses

9- Definition of inventory, inventory book and lists,

10- Probabilistic inventory models

11- Period-end inventory valuation transactions

12- Problem solving related to stock control-I

13- Problem solving related to stock control-II

14- General Repetition

*Uygulamalı Ders

**İşletmede Mesleki Eğitim

***Staj

BSEÇ: Bölüm Seçmeli Dersleri

ÜSEÇ: Üniversite Seçmeli Dersler