# EASTERN MEDITERRANEAN UNIVERSITY

## FACULTY OF PHARMACY

**Student Handbook**
**2023-2024 Academic Year**

## Dean's Message

Eastern Mediterranean University Faculty of Pharmacy, established in 2011, has been continuing to serve to pharmacy students to have them gain the skills to become a pharmacist. The faculty building has been constructed to provide all pharmaceutical disciplines to the hosted students employing diverse laboratories and subsidiaries. Drug synthesis, drug analysis, preparation of herbal preparations, drug formulation studies with additional pharmacological and toxicological perspectives of drug action have been introduced both experimentally and theoretically in courses followed.

There are two programs present at undergraduate level within the curriculum. Although both of them are bachelor degree programs, they require either a 5 year (M.Pharm., Master of Pharmacy) or 6 year (Pharm.D., Doctorate of Pharmacy) education. The M.Pharm. program, accredited and approved by YÖK (Council of Higher Education of Turkiye) and YÖDAK (Higher Education Planning, Evaluation, Accreditation and Coordination Council of Turkish Republic of Northern Cyprus) particularly welcomes students both from Turkish countries (including Turkiye) and many places of the world where pharmacy education is approved for a five year of program. On the other hand, 6 year program, Pharm.D., generally accepts students from those countries where 6 year of education is warranted for pharmacy. Proudly stating that there have been more than a thousand of students graduated from both programs so far.

One of the important aspects of having bachelor degree in Eastern Mediterranean University Faculty of Pharmacy is the possession of the chance to meet with many students from diverse countries. Indeed, our past and current students are all from at least 36 countries of the world. The multicultural organization is also another advantageous point for the students to improve themselves and this gives more courage to them to find diverse job options in the current global world. It is a privilege for Faculty of Pharmacy graduates of EMU that many of them can have careers in developed countries. Indeed, there are many graduates who conduct their major in USA, and many other European countries.

Of course, considering all the historical and natural beauties of our lovely city, our students also get the joy of living in Famagusta during their stay. As the island is in the middle of the Mediterranean Sea, many beaches, recreation and sport centers, and many other activity places have been organized by the university for the benefit of Eastern Mediterranean University students.

You can get in touch with any of the provided contact addresses of the university for your questions. Please visit the university and faculty websites for more information. The college with its modern infrastructures and the faculty members from diverse pharmaceutical disciplines are ready to welcome you for a great future career.

Prof. Dr. H. Ozan Gülcan

Dean

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## 1. Introduction

This handbook is intended to provide guidance and information about Eastern Mediterranean University Faculty of Pharmacy. The information provided in this document is subject to change. The document will be updated on the Faculty website in case needed.

## 2. About the Faculty

Faculty of Pharmacy was established in 2011-2012 academic year. The Faculty offers M.Pharm. Program and Pharm.D. Program that is composed of 10 and 12 semesters, respectively. The medium of instruction is English for both of the programs.

Faculty of Pharmacy is proud of being the first academic member of International Pharmacy Federation (FIP) from Cyprus and the second one among the faculties of pharmacy throughout Turkey. Our faculty is also represented through EMUPSS (Eastern Mediterranean University Pharmacy Students Society) as a member association of "The International Pharmaceutical Students' Federation" (IPSF) offering Student Exchange Program. This allows our students the opportunity to conduct clinical and community pharmacy practice in different countries. At the same time, with the same organization, our faculty has hosted pharmacy students from around the world.

The Faculty has student laboratories equipped with the latest technological and educational infrastructure necessary for pharmaceutical sciences including HPLC, GC-MS, FT-IR, UV spectrophotometer, laminar flow, microwave reactor, tablet machine, dissolution device, granulator, homogenizator, viscosimeter, climate cabinet, incubators, particle sizer, powder mixer, grinder, water baths, microscopes, etc. All of the laboratories are furnished with smart board. The medicinal and aromatic plant garden is arranged in front of the Faculty building for the studies in Pharmaceutical Botany and Pharmacognosy.

Our laboratory facilities are also competent for higher level of research and, despite of it's newly establishment, Faculty of Pharmacy has published approximately 500 scientific papers in the reputed journals recognized by Science Citation Index (SCI).

Since we have students more than 30 countries, Faculty of Pharmacy takes pride in having a multinational student profile and offers an international atmosphere to students in order to be socialized easily. Each year, we regularly celebrate May 14th - "Pharmacists Day" as the "Career Days" focusing on a special topic to bring our students together with exclusive guests from pharmaceutical and cosmetics industries and provide them with a fruitful discussion for their future career opportunities

### a) Mission

The missions of the Faculty are:

To raise qualified pharmacists and scientists, who have conceived principles and ethical concept of pharmacy profession, have owned top-level international fit out that can serve as first-step health advisor in community health, and have earned property of pursuing the latest scientific and technological progresses in this profession.

To contribute to the scientific research at universal and regional levels

To use the obtained knowledge for benefit of the community through pharmacy professional service

To become the best and most respected faculty of pharmacy in our region under the roof of a faculty which is able to pass on knowledge necessary for obtaining employment in international drug industry and the other branches of this profession.

### b) Vision

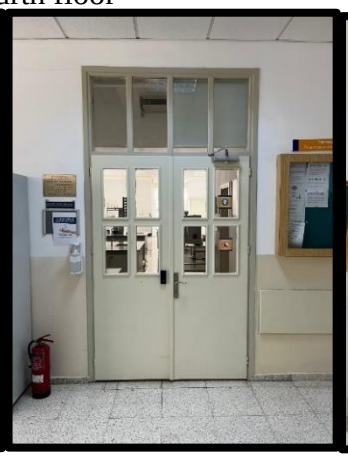
Our vision is to grow excellent individuals, who are appropriate with universal criteria of pharmacy profession, respectful to his/her job, conscientious, helpful to society, owning analytical thinking, inclined to teamwork, and who have earned internationally top-level education and instruction in the scope of pharmaceutical sciences, as well as to serve to exact science and community health.

### c) Facilities

Having been designed in accordance with the program requirements and objectives, laboratories housed by EMU Pharmacy Faculty contain the latest technical and physical features and provide educational and research-related services. The program also offers an independent microscopy lab for students' individual use. Each lab contains a smart board creating a productive educational environment for students.

**Lecture Rooms:**
PHARA116-PHARA118 - Ground Floor
PHAR 212-213-218-219-A220-A222-A224-226-227-228 – First Floor
**Research Laboratories:**
Phar L108 – Pharmaceutical Technology Research Laboratory
Phar L117 – Pharmacognosy / Pharmaceutical Botany / Pharmaceutical Microbiology / Pharmaceutical Toxicology Research Laboratory
Phar L214 – Pharmaceutical Chemistry Research Laboratory
Phar L249-250 – Cell Culture Laboratory
**Study - Computer Room:**
Phar 115 – Ground Floor
**Student Laboratories:**
Phar L215 - Pharmaceutical Technology Laboratory – First floor
Phar L301 – Pharmaceutical Botany and Pharmacognosy Laboratory – Third floor
Phar L302 – Organic Chemistry and Pharmaceutical Chemistry Laboratory – Third floor
Phar L303 – Basic Pharmaceutical Sciences Laboratory – Third floor
Phar L401 – Microscopy Laboratory – Fourth floor






## d) Career Opportunities

Graduates of the program may work in pharmacies, hospitals, drug industry, research and development laboratories, drug and medical equipment companies and any other equivalent establishments. They may also work in the cosmetics industry, thanks to the in-depth information they received from courses on cosmetology.

## e) Faculty and Staff

**Dean Office Staff**

| Name – Surname | Office no | Phone No | Duty |
|---|---|---|---|
| Prof. Dr. HAYRETTİN OZAN GÜLCAN | 323/315 | 3109/2195 | Dean |
| Assist. Prof. Dr. JALE YÜZÜGÜLEN | 322/345 | 3145/2573 | Vice Dean |
| Assist. Prof. Dr. E. DİLEK ÖZYILMAZ | 321/349 | 2636/3137 | Vice Dean |

**Full-Time Instructors**

| Name – Surname | Office no | Phone No | |
|---|---|---|---|
| Prof. Dr. EDA BECER | 350 | 2562 | Faculty Member |
| Prof. Dr. MÜBERRA KOŞAR | 317 | 3190 | Faculty Member |
| Assoc. Prof. Dr. EMRE HAMURTEKİN | 314 | 2449 | Faculty Member |
| Assist. Prof. Dr. AYBİKE YEKTAOĞLU | 329 | 3147 | Faculty Member |
| Assist. Prof. Dr. CANAN GÜLCAN | 355 | 2173 | Faculty Member |

| | | | |
|---|---|---|---|
| Assist. Prof. Dr. EMİNE VİLDAN BURGAZ | 334 | 2148 | Faculty Member |
| Assist. Prof. Dr. İMGE KUNTER | 318 | 2868 | Faculty Member |
| Assist. Prof. Dr. LEYLA BEBA POJARANİ | 353 | 3136 | Faculty Member |
| Assist. Prof. Dr. MEHMET İLKTAÇ | 336 | 2566 | Faculty Member |
| Assist. Prof. Dr. TUĞBA ERÇETİN | 331 | 2441 | Faculty Member |
| Sr. Instr. MUSTAFA AKPINAR | 327 | 3915 | Faculty Member |
| **Part-Time Instructors** | | | |
| **Name – Surname** | **Office no** | **Phone No** | |
| Prof. Dr. BENSU KARAHALİL | 330 | 2173 | Faculty Member |
| Prof. Dr. YEŞİM AKTAŞ | 330 | 2173 | Faculty Member |
| Dr. BAHAREH NOSHADI | 333 | 3135 | Faculty Member |
| Sr. Instr. AYSAN DAVATGARAN TAGHIPOOR | 333 | 3135 | Faculty Member |
| Sr. Instr. BESTE ATLI | 316 | 2563 | Faculty Member |
| Sr. Instr. CENGİZ BEREKET | 337 | 3129 | Faculty Member |
| Sr. Instr. ERTUĞRUL ÖZBİL | 326 | 3149 | Faculty Member |
| Sr. Instr. EZGİ AK SAKALLI | 316 | 2563 | Faculty Member |
| Sr. Instr. GİZEM KİNEL | 328 | 2037 | Faculty Member |
| Sr. Instr. HANANEH KORDBACHEH | 332 | 2564 | Faculty Member |
| Sr. Instr. JANNAT AL-JUBOURI | 347 | 1092 | Faculty Member |
| Sr. Instr. NARDIN SEDGHIZADEH | 332 | 2564 | Faculty Member |
| Sr. Instr. ŞENGÜL AKKARTAL | 328 | 2037 | Faculty Member |
| Sr. Instr. SHIDEH ROSHANI | 333 | 3135 | Faculty Member |
| Sr. Instr. SULTAN ÖĞMEN | 328 | 2037 | Faculty Member |
| Sr. Instr. TABASOM ABDOLLAHI | 319 | 1414 | Faculty Member |
| Sr. Instr. ZAHRA NOBAVAR | 319 | 1414 | Faculty Member |
| Instr. AÇELYA MAVİDENİZ | 319 | 1414 | Faculty Member |
| Instr. MUSTAFA ALHADI | 337 | 3129 | Faculty Member |
| Instr. NESRİN ÖZTİNEN | 316 | 2563 | Faculty Member |
| Instr. NURAN COŞKUN | 347 | 1092 | Faculty Member |
| **Administrative Staff** | | | |
| **Name – Surname** | **Office no** | **Phone No** | |
| EMİNE ERTOPRAK | 335 | 3100 | Administrative Officer |
| SEDEF DAĞYARAN | 324 | 2401 | Administrative Assistant |
| NAZEN CANCURİ | 320 | 2133 | Administrative Assistant |
| MEHMET KUMRAL | 347 | 2589 | Administrative Staff |
| **Technical Staff** | | | |
| **Name – Surname** | **Office no** | **Phone No** | |
| ŞIH OSMAN VEYSAL | 112 | 2993 | Computer Operator |

## 3. Outcomes of M. Pharm and Pharm. D. Programs

Upon completion of the M.Pharm program, students will be able to:

1. Collaborate with people from related disciplines during the data collection, interpretation, application, and announcement stages, acting in accordance with social, scientific, cultural, and ethical norms;
2. Have a sufficient knowledge about drugs and expands this knowledge;
3. Identify problems about pharmaceutical field;
4. Express their knowledge from a scientific point of view;
5. Adopt the culture of project-based working;
6. Acquire professional and ethical responsibilities;

7. Interpret information about current health and treatment problems;
8. Use pharmacy-related computer programs, technologies and educational tools;
9. Comply with quality management procedures, and take part in quality management processes;
10. Comply with relevant laws, regulations, legislations and professional ethical rules related with individual duties, rights and responsibilities;
11. Serve as a role model for colleagues and a reference model for the society with their physical appearance, attitudes, behaviors and professional identity;
12. Distinguish physiological functions and behaviors of healthy and unhealthy individuals and describe the relationship between individuals' health and their physical and social environments;
13. Apply institutional, local, national and international training program after graduation;
14. Have experience working with other health disciplines;
15. Communicate effectively in oral and written form;
16. Critically evaluate advanced knowledge and skills acquired in the field of pharmacy;
17. Work independently using advanced pharmaceutical knowledge; and take responsibility as a team member in cooperation with other professional groups working in this field;
18. Search and evaluate relevant scientific literature; Have a complete and current knowledge in the field of pharmacy.
19. Provide appropriate and effective treatment of health problems, integrate data from patient and medical records to treatment, to develop a plan for treatment using evidence based medicine

## 4. Curriculum and Brief Description

### a) Master of Pharmacy (M. Pharm.) Curriculum

| First Semester | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 1 | J1711 | CHEM105 | General Chemistry | 4 | 1 | 1 | 5 | 6 |
| 1 | J1712 | MATH155 | Mathematics | 3 | 1 | - | 3 | 4 |
| 1 | J1713 | PHYS111 | Principles of Physics | 2 | 1 | 1 | 3 | 6 |
| 1 | J1714 | ITEC105 | Computer - 1 | 2 | 2 | - | 3 | 5 |
| 1 | J1715 | ENGL191 | Communication in English – I | 3 | 1 | - | 3 | 5 |
| 1 | J1715 | ENGL181 | or Academic English - I | 5 | 1 | - | 3 | 5 |
| 1 | J1716 | TUSL181 | Turkish as a Second Language | 2 | - | - | 2 | 4 |
| 1 | J1716 | HIST280 | or Atatürk İlkeleri ve İnkılap Tarihi | 2 | - | - | 2 | 4 |
| **Second Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 2 | J1721 | BIOL124 | Introduction to Molecular Biology and Genetics | 2 | 3 | - | 3 | 6 |
| 2 | J1722 | MATH212 | Biostatistics | 2 | - | 3 | 3 | 5 |
| 2 | J1723 | PSYC108 | Introduction to Psychological Sciences | 3 | - | - | 3 | 3 |
| 2 | J1724 | MDCN140 | First Aid and Medical Devices | 1 | - | 1 | 1 | 3 |
| 2 | J1725 | MDCN142 | Anatomy and Histology | 2 | - | 2 | 3 | 3 |
| 2 | J1726 | NUTD223 | Nutrition and Dietary Treatment | 3 | - | - | 3 | 2 |
| 2 | J1727 | PHAR206 | Medical Terminology | 2 | - | - | 2 | 3 |
| | | | | | | | | |
| 2 | J1728 | ENGL182 | Academic English – II | 5 | 1 | - | 3 | 5 |
| 2 | J1728 | ENGL192 | or Communication in English - II | 3 | - | 1 | 3 | 5 |
| **Third Semester** | | | | | | | | |

| Sem. | Ref. Code | Course Code | Full Course Title | Lec. | Lab | Tut. | Credit | ECTS |
|---|---|---|---|---|---|---|---|---|
| 3 | J1731 | CHEM243 | Organic Chemistry - I | 4 | 1 | - | 4 | 6 |
| 3 | J1732 | CHEM247 | Analytical Chemistry - I | 3 | 2 | - | 4 | 6 |
| 3 | J1733 | MDCN241 | Medical Microbiology | 3 | - | 1 | 3 | 5 |
| 3 | J1734 | MDCN243 | Public Health | 2 | - | - | 2 | 2 |
| 3 | J1735 | MDCN245 | Physiology - I | 4 | - | - | 4 | 5 |
| 3 | J1736 | MDCN247 | Virology and Parasitology | 3 | - | 2 | 4 | 6 |
| **Fourth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 4 | J1741 | CHEM246 | Organic Chemistry - II | 3 | - | 2 | 4 | 4 |
| 4 | J1742 | CHEM254 | Biochemistry | 2 | 2 | - | 3 | 6 |
| 4 | J1743 | BIOL412 | Immunology | 3 | 3 | - | 4 | 5 |
| 4 | J1744 | MDCN144 | Pathology | 2 | - | - | 2 | 2 |
| 4 | J1745 | MDCN244 | Physiology - II | 3 | - | 2 | 4 | 6 |
| 4 | J1746 | PHAR204 | Pharmaceutical Botany | 2 | - | 2 | 3 | 5 |
| 4 | J1747 | CHEM248 | Analytical Chemistry - II | 3 | 1 | - | 3 | 4 |
| **Fifth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 5 | J1751 | PHAR301 | Pharmacology - I | 3 | - | - | 3 | 6 |
| 5 | J1752 | PHAR303 | Pharmaceutical Chemistry - I | 2 | - | 2 | 3 | 5 |
| 5 | J1753 | PHAR305 | Pharmacognosy - I | 2 | - | 2 | 3 | 5 |
| 5 | J1754 | PHAR307 | Pharmaceutical Technology - I | 3 | - | 2 | 4 | 6 |
| 5 | J1755 | PHAR309 | Pharmaceutical Biotechnology and Cell Culture | 4 | - | - | 4 | 5 |
| 5 | J1756 | PHAR311 | History and Ethics of Pharmacy | 1 | - | - | 1 | 2 |
| **Sixth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 6 | J1761 | PHAR302 | Pharmacology - II | 3 | - | - | 3 | 4 |
| 6 | J1762 | PHAR304 | Pharmaceutical Chemistry - II | 2 | - | 3 | 3 | 6 |
| 6 | J1763 | PHAR306 | Pharmacognosy - II | 2 | - | 3 | 3 | 5 |
| 6 | J1764 | PHAR308 | Pharmaceutical Technology - II | 3 | - | 3 | 4 | 6 |
| 6 | J1765 | PHAR310 | Pharmacoeconomics | 3 | - | - | 3 | 4 |
| 6 | J1766 | UE01 | University Elective - I | 3 | - | - | 3 | 4 |
| **Seventh Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 7 | J1771 | PHAR401 | Pharmacology - III | 2 | - | 1 | 2 | 4 |
| 7 | J1772 | PHAR403 | Pharmacognosy - III | 2 | - | 3 | 3 | 5 |
| 7 | J1773 | PHAR405 | Pharmaceutical Chemistry - III | 2 | - | 3 | 3 | 6 |
| 7 | J1774 | PHAR407 | Pharmaceutical Technology - III | 2 | - | 3 | 3 | 6 |
| 7 | J1775 | PHAR409 | Pharmaceutical Toxicology | 3 | - | 2 | 4 | 6 |
| 7 | J1776 | PHAR411 | Pharmacotherapy - I | 3 | - | - | 3 | 4 |
| **Eighth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 8 | J1781 | PHAR402 | Cosmetics Science | 2 | - | - | 2 | 4 |
| 8 | J1782 | PHAR404 | Phytotherapy | 2 | - | - | 2 | 4 |
| 8 | J1783 | PHAR406 | Pharmaceutical Chemistry - IV | 2 | - | 3 | 3 | 3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | J1784 | PHAR408 | Pharmaceutical Technology - IV | 2 | - | 3 | 3 | 5 |
| 8 | J1785 | PHAR410 | Clinical Biochemistry | 2 | - | - | 2 | 5 |
| 8 | J1786 | PHAR412 | Pharmacotherapy - II | 3 | - | - | 3 | 5 |
| 8 | J1787 | UE02 | University Elective - II | 3 | - | - | 3 | 3 |
| **Ninth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 9 | J1791 | PHAR451 | Thesis Project - I | - | - | 4 | 2 | 6 |
| 9 | J1792 | AE01 | Area Elective - I | 3 | - | - | 3 | 5 |
| 9 | J1793 | AE02 | Area Elective – II | 3 | - | - | 3 | 5 |
| 9 | J1794 | AE03 | Area Elective – III | 3 | - | - | 3 | 5 |
| 9 | J1795 | AE04 | Area Elective - IV | 3 | - | - | 3 | 5 |
| 9 | J1796 | UE03 | University Elecitive - III | 3 | - | - | 3 | 4 |
| **Tenth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 10 | J17A1 | PHAR450 | Training | - | - | 10 | - | 24 |
| 10 | J17A2 | PHAR452 | Thesis Project - II | - | - | 6 | 3 | 6 |

## b) Master of Pharmacy (M. Pharm) Brief Course Description

**CHEM105 General Chemistry**

Offers an adequate background in fundamental of general chemistry.

**MATH155 Mathematics**

Refreshes the college mathematics background of the students with the aid of selected applications.

**PHYS111 Introduction to Physics**

Introduces the fundamental concepts of classical mechanis, electricity and magnetism.

**ITEC105 Computer-I**

Presents the basic description of information technology concepts, basic computer hardware and software components and common terminology in information technology.

**ENGL191 Communication in English - I**

Introduces the students to the knowledge and awareness of academic discourse, language structures and lexis. The main focus will be on the development of productive (writing and speaking) and receptive (reading) skills in academic settings.

**ENGL181 Academic English – I**

Introduces the students to the knowledge and awareness of academic discourse, language structures and lexis. The main focus will be on the development of productive (writing and speaking) and receptive (reading) skills in academic settings.

**HIST280 Atatürk İlkeleri ve İnkılap Tarihi**

Bu derste Osmanlı İmparatorluğu'nun çöküşü, Tanzimat ve Islahat Fermanları, I. ve II. Meşrutiyet dönemleri, I. Dünya Savaşı ve Osmanlı Devleti'nin Savaşa girişi, Mondros Ateşkesi, Atatürk'ün kişiliği ve Samsuna çıkışı, kongreler dönemi ve Kurtuluş Savaşı, Saltanatın kaldırılması, Lozan Barış Antlaşması, Atatürk ilke ve inkılapları, modern Türkiye konuları yer almaktadır

**TUSL181 Turkish as a Second Language**

Introduces the Turkish language to students with no or a little knowledge of Turkish. The course incorporates four language skills (reading, writing, listening, speaking) and covers basic grammar, vocabulary and pronunciation.

**BIOL124 Introduction to Molecular Biology and Genetics**

Provides an understanding of molecular basis of genetics and how this relates to human genetic diseases.

**MATH212 Biostatistics**

Introduces basic statistics concepts applied in biologic and pharmaceutical data.

**PSYC108 Introduction to Psychological Sciences**

Provides students ability to understand and analyze the general concepts and approaches of different psychology fields.

**MDCN140 First Aid and Medical Devices**

Enables individuals to perform initial assessments of patients with emergency health problems.

**MDCN142 Anatomy and Histology**

Studies of the anatomical structure of the human body and introduces the cell structure and the cell membrane, the cytoplasmic organelles, histology of epithelial tissue, connective and supportive tissues, cartilage, bone, muscle tissue, blood, nervous tissue.

**NUTD223 Nutrition and Dietary Treatment**

Identifies the nutrients such as carbohydrates, proteins, fats, vitamins and minerals, their food sources, amounts needed and use by the body.

**PHAR206 Medical Terminology**

Introduces the vocabulary, abbreviations, and symbols used in the language of pharmacy and medicine.

**ENGL192 Communication in English - II**

Introduces the students to the knowledge and awareness of academic discourse, language structures and lexis. The main focus will be on the development of productive (writing and speaking) and receptive (reading) skills in academic settings.

**ENGL182 Academic English – II**

Introduces the students to the knowledge and awareness of academic discourse, language structures and lexis. The main focus will be on the development of productive (writing and speaking) and receptive (reading) skills in academic settings.

**CHEM243 Organic Chemistry - I**

Aims to teach the basic and fundamental principles of organic chemistry.

**CHEM247 Analytical Chemistry - I**

Introduces students with a rigorous background knowledge in the fundamentals of classical chemical analyses with a wide range of classical analytical techniques.

**MDCN241 Medical Microbiology**

Introduction of pathogenic species of bacteria and fungi, and prevention and treatment of bacterial and fungal diseases.

**MDCN243 Public Health**

Public health information, family planning, birth control, epidemiology, communicable diseases, immunization, environmental sanitation, non-communicable diseases, population screening, promotion techniques for healthy lifestyle and improvement of well-being.

**MDCN245 Physiology– I**

Aims to teach the student in cellular and molecular aspects of human health and physiology.

**MDCN247 Virology and Parasitology**

Introduction of pathogenic species viruses and parasites, and prevention and treatment of related diseases.

**CHEM246 Organic Chemistry – II**

Provides students with the most important knowledge related to the chemistry of alcohols, ethers, organometallic compounds, conjugated unsaturated systems, aromatic compounds, carbonyl compounds and heterocycles.

**CHEM254 Biochemistry**

Provides an adequate background in fundamentals of descriptive, applied and theoretical introduction to biochemistry.

**BIOL412 Immunology**

Aims to teach basic concepts of immunology and the use of immunology knowledge in the field of molecular biology and genetics and in pharmaceutical industry.

**MDCN144 Pathology**

Aims to teach major pathological conditions, basic pathophysiological processes in various organ system diseases and treatment strategies to overcome such conditions.

**MDCN244 Physiology – II**

Explains the basic concepts that govern each organ and organ system and their integration to maintain homeostasis, as well as some clinical aspects of failure of these systems.

**PHAR204 Pharmaceutical Botany**

Understanding of the morphology and the classification (taxonomy) of medicinal plants.

**CHEM248 Analytical Chemistry - II**

Introduces students with a rigorous background knowledge in the fundamentals of electrochemical and instrumental analytical chemistry with a wide range of classical analytical techniques.

**PHAR301 Pharmacology - I**

Provides students an understanding of basic principles of pharmacokinetics (absorption, distribution, biotransformation, and excretion of drugs), routes of drug administration, dose-concentration relationships, drug-receptor interactions and dose-response relationships.

**PHAR303 Pharmaceutical Chemistry - I**

Aims to teach general concepts in pharmaceutical chemistry, drug likely properties, drug targets an basic laboratory skills for drug synthesis.

**PHAR305 Pharmacognosy - I**

Aims to teach general definitions and concepts of pharmacognosy and biosynthesis of natural products, qualitative and quantitative analysis methods of plant chemicals.

**PHAR307 Pharmaceutical Technology - I**

Aims to teach basic knowledge of pharmaceutical dosage types, pharmaceutical unit operations (mixing, filtration etc.) and manufacturing, original vs generic drugs, liquid dosage forms, formulation aids used in liquid dosage forms (colorants, flavorings), quality control of liquid dosage forms, solubility phenomena and solubility enhancement techniques, basic pharmaceutical calculations (concentration and dose calculations etc.), packaging and labelling.

**PHAR309 Pharmaceutical Biotechnology and Cell Culture**

Aims to teach students pharmaceutical biotechnology, principles, preparation, selection and the maintenance of cell culture.

**PHAR311 History and Ethics of Pharmacy**

Aims to teach ethical issues and ethical responsibilities, and to give information of ethical examples.

**PHAR302 Pharmacology - II**

Implements a rational and effective approach to explain drug-based treatments used in autonomic nervous system and endocrine system.

**PHAR304 Pharmaceutical Chemistry - II**

Offers the opportunity to the student to learn synthesis, structure activity relationships, metabolism, and side effect profiles of the drugs under the following pharmacological groups: Autonomic nervous system, introduction to central nervous system drugs, cholinergic system drugs, adrenergic system drugs, dopaminergic system drugs, serotoninergic system drugs, amino acid as neurotransmitters, sedative-hypnotics, anxiety and schizophrenia drugs.

**PHAR306 Pharmacognosy - II**

Aims to teach the understanding the essential oils, fixed oils and alkaloids, the usage of the quality and quantity of the analyses methods for essential oils, fixed oils and alkaloids.

**PHAR308 Pharmaceutical Technology - II**

Aims to teach basic knowledge for pre-formulation and formulation of drugs, pharmaceutical unit operations and manufacturing, packaging and quality control for particularly for: Pharmaceutical colloidal systems and pharmaceutical semisolids drug delivery dosage form.

**PHAR310 Pharmacoeconomics**

Aims to teach students the business, economical, and management perspectives of pharmaceutical areas including but not limited to community pharmacy, warehouses, hospitals and RD units.

**PHAR401 Pharmacology - III**

Aims to teach students drugs used in the treatment of cardiovascular disease treatments and drugs used in the treatment of central nervous system.

**PHAR403 Pharmacognosy - III**

Aims to teach the understanding of the drug discovery from medicinal plants, the knowledge on natural products for pharmaceutical use as active and additives, and knowledge on the use of herbal drugs in veterinary and agricultural applications.

**PHAR405 Pharmaceutical Chemistry - III**

Aims to teach the synthesis, structure activity relationships, metabolism, and side effect profiles of the drugs under the following pharmacological groups: Antineoplastic, antimicrobials, anti-bacterials, antivirals, antifungals, drugs topic of abuse, narcotic analgesics, non-steroidal anti-inflammatory drugs, drugs used to treat depression.

**PHAR407 Pharmaceutical Technology - III**

Aims to teach basic knowledge for pre-formulation and formulation of parenteral drugs, and manufacturing, packaging and quality control for particularly for sterile pharmaceutical dosage forms.

**PHAR409 Pharmaceutical Toxicology**

Aims to teach students how to use toxicology information in the daily life, and in the industry, pharmacy and hospital settings.

**PHAR411 Pharmacotherapy - I**

Aims to teach treatment strategies in allergic asthma, allergic rhinitis management, management of coughing, pharmacological treatment for peptic ulcer, laxatives and anti-diarrheal agents, and management of emesis pharmacotherapy of pain.

**PHAR402 Cosmetic Science**

Supports students to gain updated information on cosmetic science; properties of the skin, hair and nails and the cosmetic products and ingredients that may actively affect these properties and critically review, analyze, and evaluate scientific data and basic research in cosmetic science.

**PHAR404 Phytotherapy**

Aims to teach the understanding the phytotherapy and importance, the understanding the advantage and disadvantage of the phytotherapy, the understanding the regulations for medicinal plants and phytotherapy, and the understanding the medicinal plants used for different diseases according to different systems in the body.

**PHAR406 Pharmaceutical Chemistry - IV**

Aims to teach the basic concepts of steroids, the knowledge and understanding of the basic experimental principles of steroid chemistry, the knowledge about the mechanism pathways of different class of medicinal compounds, and the relevant chemical reactions/synthetic pathways for selected drugs/diseases.

**PHAR408 Pharmaceutical Technology - IV**

Aims to teach basic knowledge for pre-formulation and formulation of drugs, pharmaceutical unit operations and manufacturing, packaging and quality control for particularly for pharmaceutical solid products, e.g, powders, granules, tablet and capsules and other solid dosage forms.

**PHAR410 Clinical Biochemistry**

Aims to teach the biochemical measurements that is important in diagnosing diabetes, monitoring its control and treating its metabolic complications and the nature of enzyme, including physical composition, structure, and classification, factors affecting the rate of reaction and why the measurement of serum enzyme level is clinically useful.

**PHAR412 Pharmacotherapy - II**

Aims to teach main principles in antibiotic use, safe and appropriate use of antibiotics, management of common infectious diseases, and the management of complications during the chemotheraputics use.

**PHAR451 Thesis Project - I**

Student is expected to collect scientific literature and cover information on a subject which will be established under supervision of an academic staff posted by a department of the student's interest and make an oral presentation of one the articles.

**PHAR452 Thesis Project - II**

By evaluating the scientific literature collected by the student on the subject established in Thesis Project I, student is expected to prepare a thesis report and present both orally and in written form.

**PHAR450 Training**

This lecture includes training in community and hospital pharmacy settings and he/she will be qualified for the exam which will be done by training commission.

### c) Doctorate of Pharmacy (D. Pharm.) Curriculum

| First Semester | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 1 | J2711 | CHEM105 | General Chemistry | 4 | 1 | 1 | 5 | 6 |
| 1 | J2712 | MATH155 | Mathematics | 3 | 1 | - | 3 | 4 |
| 1 | J2713 | PHYS111 | Principles of Physics | 2 | 1 | 1 | 3 | 6 |
| 1 | J2714 | ITEC105 | Computer - 1 | 2 | 2 | - | 3 | 5 |
| 1 | J2715 | ENGL191 | | 3 | 1 | - | 3 | 5 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | J2715 | ENGL181 | Communication in English – I<br>or<br>Academic English – I | 5 | 1 | - | 3 | 5 |
| 1 | J2716 | TUSL181 | Turkish as a Second Language<br>or<br>Atatürk İlkeleri ve İnkilap Tarihi | 2 | - | - | 2 | 4 |
| 1 | J2716 | HIST280 | | 2 | - | - | 2 | 4 |
| **Second Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 2 | J2721 | BIOL124 | Introduction to Molecular Biology and Genetics | 2 | 3 | - | 3 | 6 |
| 2 | J2722 | MATH212 | Biostatistics | 2 | - | 3 | 3 | 5 |
| 2 | J2723 | PSYC108 | Introduction to Psychological Sciences | 3 | - | - | 3 | 3 |
| 2 | J2724 | MDCN140 | First Aid and Medical Devices | 1 | - | 1 | 1 | 3 |
| 2 | J2725 | MDCN142 | Anatomy and Histology | 2 | - | 2 | 3 | 3 |
| 2 | J2726 | NUTD223 | Nutrition and Dietary Treatment | 3 | - | - | 3 | 2 |
| 2 | J2727 | PHAR206 | Medical Terminology | 2 | - | - | 2 | 3 |
| 2 | J2728 | ENGL182 | Academic English – II<br>or<br>Communication in English - II | 5 | 1 | - | 3 | 5 |
| 2 | J2728 | ENGL192 | | 3 | - | 1 | 3 | 5 |
| **Third Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 3 | J2731 | CHEM243 | Organic Chemistry – I | 4 | 1 | - | 4 | 6 |
| 3 | J2732 | CHEM247 | Analytical Chemistry – I | 3 | 2 | - | 4 | 6 |
| 3 | J2733 | MDCN241 | Medical Microbiology | 3 | - | 1 | 3 | 5 |
| 3 | J2734 | MDCN243 | Public Health | 2 | - | - | 2 | 2 |
| 3 | J2735 | MDCN245 | Physiology - I | 4 | - | - | 4 | 5 |
| 3 | J2736 | MDCN247 | Virology and Parasitology | 3 | - | 2 | 4 | 6 |
| **Fourth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 4 | J2741 | CHEM246 | Organic Chemistry - II | 3 | - | 2 | 4 | 4 |
| 4 | J2742 | CHEM254 | Biochemistry | 2 | 2 | - | 3 | 6 |
| 4 | J2743 | BIOL412 | Immunology | 3 | 3 | - | 4 | 5 |
| 4 | J2744 | MDCN144 | Pathology | 2 | - | - | 2 | 2 |
| 4 | J2745 | MDCN244 | Physiology - II | 3 | - | 2 | 4 | 6 |
| 4 | J2746 | PHAR204 | Pharmaceutical Botany | 2 | - | 2 | 3 | 5 |
| 4 | J2747 | CHEM248 | Analytical Chemistry - II | 3 | 1 | - | 3 | 4 |
| **Fifth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 5 | J2751 | PHAR301 | Pharmacology – I | 3 | - | - | 3 | 6 |
| 5 | J2752 | PHAR303 | Pharmaceutical Chemistry - I | 2 | - | 2 | 3 | 5 |
| 5 | J2753 | PHAR305 | Pharmacognosy – I | 2 | - | 2 | 3 | 5 |
| 5 | J2754 | PHAR307 | Pharmaceutical Technology - I | 3 | - | 2 | 4 | 6 |
| 5 | J2755 | PHAR309 | Pharmaceutical Biotechnology and Cell Culture | 4 | - | - | 4 | 5 |
| 5 | J2756 | PHAR311 | History and Ethics of Pharmacy | 1 | - | - | 1 | 2 |
| **Sixth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6 | J2761 | PHAR302 | Pharmacology – II | 3 | - | - | 3 | 4 |
| 6 | J2762 | PHAR304 | Pharmaceutical Chemistry - II | 2 | - | 3 | 3 | 6 |
| 6 | J2763 | PHAR306 | Pharmacognosy – II | 2 | - | 3 | 3 | 5 |
| 6 | J2764 | PHAR308 | Pharmaceutical Technology - II | 3 | - | 3 | 4 | 6 |
| 6 | J2765 | PHAR310 | Pharmacoeconomics | 3 | - | - | 3 | 4 |
| 6 | J2766 | PHAR312 | Physical Pharmacy – I | 3 | - | - | 3 | 4 |
| **Seventh Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 7 | J2771 | PHAR401 | Pharmacology – III | 2 | - | 1 | 2 | 4 |
| 7 | J2772 | PHAR403 | Pharmacognosy – III | 2 | - | 3 | 3 | 5 |
| 7 | J2773 | PHAR405 | Pharmaceutical Chemistry - III | 2 | - | 3 | 3 | 6 |
| 7 | J2774 | PHAR407 | Pharmaceutical Technology - III | 2 | - | 3 | 3 | 6 |
| 7 | J2775 | PHAR409 | Pharmaceutical Toxicology | 3 | - | 2 | 4 | 6 |
| 7 | J2776 | PHAR411 | Pharmacotherapy – I | 3 | - | - | 3 | 4 |
| **Eighth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 8 | J2781 | PHAR402 | Cosmetics Science | 2 | - | - | 2 | 4 |
| 8 | J2782 | PHAR404 | Phytotherapy | 2 | - | - | 2 | 4 |
| 8 | J2783 | PHAR406 | Pharmaceutical Chemistry - IV | 2 | - | 3 | 3 | 3 |
| 8 | J2784 | PHAR408 | Pharmaceutical Technology - IV | 2 | - | 3 | 3 | 5 |
| 8 | J2785 | PHAR410 | Clinical Biochemistry | 2 | - | - | 2 | 5 |
| 8 | J2786 | PHAR412 | Pharmacotherapy – II | 3 | - | - | 3 | 5 |
| 8 | J2787 | PHAR414 | Physical Pharmacy - II | 3 | - | - | 3 | 3 |
| **Ninth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 9 | J2791 | PHAR451 | Thesis Project – I | - | - | 4 | 2 | 6 |
| 9 | J2792 | PHAR455 | Biopharmacy and Pharmacokinetics | 3 | - | - | 3 | 5 |
| 9 | J2793 | PHAR457 | Microbial Control of Pharmaceuticals | 3 | - | - | 3 | 5 |
| 9 | J2794 | PHAR459 | Physicochemical Control of Pharmaceuticals | 3 | - | - | 3 | 5 |
| 9 | J2795 | AE01 | Area Elective – I | 3 | - | - | 3 | 5 |
| 9 | J2796 | UE01 | University Elecitive – I | 3 | - | - | 3 | 4 |
| **Tenth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 10 | J27A1 | PHAR452 | Thesis Project – II | - | - | 6 | 3 | 6 |
| 10 | J27A2 | PHAR454 | Intoxication Control | 2 | - | - | 2 | 4 |
| 10 | J27A3 | PHAR456 | Biological Products | 2 | - | - | 2 | 4 |
| 10 | J27A4 | PHAR458 | Instrumental Analytical Methods | 3 | - | 1 | 3 | 6 |
| 10 | J27A5 | AE02 | Area Elective – II | 3 | - | - | 3 | 5 |
| 10 | J27A6 | UE02 | University Elective – II | 3 | - | - | 3 | 5 |
| **Eleventh Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 11 | J27B1 | PHAR453 | Thesis Project – III | 4 | - | - | 4 | 6 |
| 11 | J27B2 | PHAR461 | Hospital Pharmacy Practice | 2 | - | - | 2 | 8 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 11 | J27B3 | PHAR462 | Pharmacy Practice | 2 | - | - | 2 | 8 |
| 11 | J27B4 | PHAR463 | Industrial Pharmacy Practice | 2 | - | - | 2 | 8 |
| **Twelfth Semester** | | | | | | | | |
| **Sem.** | **Ref. Code** | **Course Code** | **Full Course Title** | **Lec.** | **Lab** | **Tut.** | **Credit** | **ECTS** |
| 12 | J27C1 | PHAR464 | Pharmacy Practice Clerkship | 6 | - | - | 6 | 15 |
| 12 | J27C2 | PHAR466 | Industrial Pharmacy Clerkship | 6 | - | - | 6 | 15 |
| 12 | J27C3 | PHAR465 | Hospital Pharmacy Clerkship | 2 | - | - | 2 | 15 |

## d) Doctorate of Pharmacy (D. Pharm.) Brief Course Descriptions

**CHEM105 General Chemistry**
Offers an adequate background in fundamental of general chemistry.

**MATH155 Mathematics**
Refreshes the college mathematics background of the students with the aid of selected applications.

**PHYS111 Introduction to Physics**
Introduces the fundamental concepts of classical mechanics, electricity and magnetism.

**ITEC105 Computer-I**
Presents the basic description of information technology concepts, basic computer hardware and software components and common terminology in information technology.

**ENGL191 Communication in English - I**
Introduces the students to the knowledge and awareness of academic discourse, language structures and lexis. The main focus will be on the development of productive (writing and speaking) and receptive (reading) skills in academic settings.

**ENGL181 Academic English – I**
Introduces the students to the knowledge and awareness of academic discourse, language structures and lexis. The main focus will be on the development of productive (writing and speaking) and receptive (reading) skills in academic settings.

**TUSL181 Turkish as a Second Language**
Introduces the Turkish language to students with no or a little knowledge of Turkish. The course incorporates four language skills (reading, writing, listening, speaking) and covers basic grammar, vocabulary and pronunciation.

**BIOL124 Introduction to Molecular Biology and Genetics**
Provides an understanding of molecular basis of genetics and how this relates to human genetic diseases.

**MATH212 Biostatistics**
Introduces basic statistics concepts applied in biologic and pharmaceutical data.

**PSYC108 Introduction to Psychological Sciences**
Provides students ability to understand and analyze the general concepts and approaches of different psychology fields.

**MDCN140 First Aid and Medical Devices**
Enables individuals to perform initial assessments of patients with emergency health problems.

**MDCN142 Anatomy and Histology**
Studies of the anatomical structure of the human body and introduces the cell structure and the cell membrane, the cytoplasmic organelles, histology of epithelial tissue, connective and supportive tissues, cartilage, bone, muscle tissue, blood, nervous tissue.

**NUTD223 Nutrition and Dietary Treatment**
Identifies the nutrients such as carbohydrates, proteins, fats, vitamins and minerals, their food sources, amounts needed and use by the body.

**PHAR206 Medical Terminology**
Introduces the vocabulary, abbreviations, and symbols used in the language of pharmacy and medicine.

**ENGL192 Communication in English - II**
Introduces the students to the knowledge and awareness of academic discourse, language structures and lexis. The main focus will be on the development of productive (writing and speaking) and receptive (reading) skills in academic settings.

**ENGL182 Academic English – II**
Introduces the students to the knowledge and awareness of academic discourse, language structures and lexis. The main focus will be on the development of productive (writing and speaking) and receptive (reading) skills in academic settings.
**CHEM243 Organic Chemistry - I**
Aims to teach the basic and fundamental principles of organic chemistry.
**CHEM247 Analytical Chemistry - I**
Introduces students with a rigorous background knowledge in the fundamentals of classical chemical analyses with a wide range of classical analytical techniques.
**MDCN241 Medical Microbiology**
Introduction of pathogenic species of bacteria and fungi, and prevention and treatment of bacterial and fungal diseases.
**MDCN243 Public Health**
Public health information, family planning, birth control, epidemiology, communicable diseases, immunization, environmental sanitation, non-communicable diseases, population screening, promotion techniques for healthy lifestyle and improvement of well-being.
**MDCN245 Physiology– I**
Aims to teach the student in cellular and molecular aspects of human health and physiology.
**MDCN247 Virology and Parasitology**
Introduction of pathogenic species viruses and parasites, and prevention and treatment of related diseases.
**CHEM246 Organic Chemistry – II**
Provides students with the most important knowledge related to the chemistry of alcohols, ethers, organometallic compounds, conjugated unsaturated systems, aromatic compounds, carbonyl compounds and heterocycles.
**CHEM254 Biochemistry**
Provides an adequate background in fundamentals of descriptive, applied and theoretical introduction to biochemistry.
**BIOL412 Immunology**
Aims to teach basic concepts of immunology and the use of immunology knowledge in the field of molecular biology and genetics and in pharmaceutical industry.
**MDCN144 Pathology**
Aims to teach major pathological conditions, basic pathophysiological processes in various organ system diseases and treatment strategies to overcome such conditions.
**MDCN244 Physiology – II**
Explains the basic concepts that govern each organ and organ system and their integration to maintain homeostasis, as well as some clinical aspects of failure of these systems.
**PHAR204 Pharmaceutical Botany**
Understanding of the morphology and the classification (taxonomy) of medicinal plants.
**CHEM248 Analytical Chemistry - II**
Introduces students with a rigorous background knowledge in the fundamentals of electrochemical and instrumental analytical chemistry with a wide range of classical analytical techniques.
**PHAR301 Pharmacology - I**
Provides students an understanding of basic principles of pharmacokinetics (absorption, distribution, biotransformation, and excretion of drugs), routes of drug administration, dose-concentration relationships, drug-receptor interactions and dose-response relationships.
**PHAR303 Pharmaceutical Chemistry - I**
Aims to teach general concepts in pharmaceutical chemistry, drug likely properties, drug targets and basic laboratory skills for drug synthesis.
**PHAR305 Pharmacognosy - I**
Aims to teach general definitions and concepts of pharmacognosy and biosynthesis of natural products, qualitative and quantitative analysis methods of plant chemicals.
**PHAR307 Pharmaceutical Technology - I**
Aims to teach basic knowledge of pharmaceutical dosage types, pharmaceutical unit operations (mixing, filtration etc.) and manufacturing, original vs generic drugs, liquid dosage forms, formulation aids used in liquid dosage forms (colorants, flavorings), quality control of liquid dosage forms, solubility

phenomena and solubility enhancement techniques, basic pharmaceutical calculations (concentration and dose calculations etc.), packaging and labelling.

**PHAR309 Pharmaceutical Biotechnology and Cell Culture**

Aims to teach students pharmaceutical biotechnology, principles, preparation, selection and the maintenance of cell culture.

**PHAR311 History and Ethics of Pharmacy**

Aims to teach ethical issues and ethical responsibilities, and to give information of ethical examples.

**PHAR302 Pharmacology - II**

Implements a rational and effective approach to explain drug-based treatments used in autonomic nervous system and endocrine system.

**PHAR304 Pharmaceutical Chemistry - II**

Offers the opportunity to the student to learn synthesis, structure activity relationships, metabolism, and side effect profiles of the drugs under the following pharmacological groups: Autonomic nervous system, introduction to central nervous system drugs, cholinergic system drugs, adrenergic system drugs, dopaminergic system drugs, serotoninergic system drugs, amino acid as neurotransmitters, sedative-hypnotics, anxiety and schizophrenia drugs.

**PHAR306 Pharmacognosy - II**

Aims to teach the understanding the essential oils, fixed oils and alkaloids, the usage of the quality and quantity of the analyses methods for essential oils, fixed oils and alkaloids.

**PHAR308 Pharmaceutical Technology - II**

Aims to teach basic knowledge for pre-formulation and formulation of drugs, pharmaceutical unit operations and manufacturing, packaging and quality control for particularly for: Pharmaceutical colloidal systems and pharmaceutical semisolids drug delivery dosage form.

**PHAR310 Pharmacoeconomics**

Aims to teach students the business, economical, and management perspectives of pharmaceutical areas including but not limited to community pharmacy, warehouses, hospitals and RD units.

**PHAR312 Physical Pharmacy – I**

Provides the basis for understanding the chemical and physical phenomena that govern the in vivo and in vitro actions of pharmaceutical products.

**PHAR401 Pharmacology - III**

Aims to teach students drugs used in the treatment of cardiovascular disease treatments and drugs used in the treatment of central nervous system.

**PHAR403 Pharmacognosy - III**

Aims to teach the understanding of the drug discovery from medicinal plants, the knowledge on natural products for pharmaceutical use as active and additives, and knowledge on the use of herbal drugs in veterinary and agricultural applications.

**PHAR405 Pharmaceutical Chemistry - III**

Aims to teach the synthesis, structure activity relationships, metabolism, and side effect profiles of the drugs under the following pharmacological groups: Antineoplastic, antimicrobials, antibacterials, antivirals, antifungals, drugs topic of abuse, narcotic analgesics, non-steroidal antiinflammatory drugs, drugs used to treat depression.

**PHAR407 Pharmaceutical Technology - III**

Aims to teach basic knowledge for preformulation and formulation of parenteral drugs, and manufacturing, packaging and quality control for particularly for sterile pharmaceutical dosage forms.

**PHAR409 Pharmaceutical Toxicology**

Aims to teach students how to use toxicology information in the daily life, and in the industry, pharmacy and hospital settings.

**PHAR411 Pharmacotherapy - I**

Aims to teach treatment strategies in allergic asthma, allergic rhinitis management, management of coughing, pharmacological treatment for peptic ulcer, laxatives and anti-diarrheal agents, and management of emesis pharmacotherapy of pain.

**PHAR402 Cosmetic Science**

Supports students to gain updated information on cosmetic science; properties of the skin, hair and nails and the cosmetic products and ingredients that may actively affect these properties and critically review, analyze, and evaluate scientific data and basic research in cosmetic science.

**PHAR404 Phytotherapy**
Aims to teach the understanding the phytotherapy and importance, the understanding the advantage and disadvantage of the phytotherapy, the understanding the regulations for medicinal plants and phytotherapy, and the understanding the medicinal plants used for different diseases according to different systems in the body.

**PHAR406 Pharmaceutical Chemistry - IV**
Aims to teach the basic concepts of steroids, the knowledge and understanding of the basic experimental principles of steroid chemistry, the knowledge about the mechanism pathways of different class of medicinal compounds, and the relevant chemical reactions/synthetic pathways for selected drugs/diseases.

**PHAR408 Pharmaceutical Technology - IV**
Aims to teach basic knowledge for pre-formulation and formulation of drugs, pharmaceutical unit operations and manufacturing, packaging and quality control for particularly for pharmaceutical solid products, e.g, powders, granules, tablet and capsules and other solid dosage forms.

**PHAR410 Clinical Biochemistry**
Aims to teach the biochemical measurements that is important in diagnosing diabetes, monitoring its control and treating its metabolic complications and the nature of enzyme, including physical composition, structure, and classification, factors affecting the rate of reaction and why the measurement of serum enzyme level is clinically useful.

**PHAR412 Pharmacotherapy - II**
Aims to teach main principles in antibiotic use, safe and appropriate use of antibiotics, management of common infectious diseases, and the management of complications during the chemotherapeutic use.

**PHAR414 Physical Pharmacy – II**
Integrates knowledge of mathematics, physics and chemistry and applies them to the pharmaceutical dosage form development.

**PHAR451 Thesis Project - I**
Student is expected to collect scientific literature and cover information on a subject which will be established under supervision of an academic staff posted by a department of the student's interest and and make an oral presentation of one the articles.

**PHAR455 Biopharmacy and Pharmacokinetics**
Provides the student with a quantitative treatment of the dynamics of drug absorption, distribution, metabolism, and excretion, including the development of mathematical models for these processes.

**PHAR457 Microbial Control of Pharmaceuticals**
Aims to teach the importance of microbial contamination in pharmaceutical industry and methods for investigating the quality of sterile and non-sterile pharmaceuticals.

**PHAR459 Physicochemical Control of Pharmaceuticals**
Aims to teach the importance of physicohemical properties and controls in pharmaceutical industry, provide general information about pharmacopeial methods and reference standards and introduce the students to the methods for controlling the quality of pharmaceuticals according to Pharmacopoeias.

**PHAR 478 Clinical Pharmacy**
Provides students an understanding of basic principles of clinical pharmacy services, pharmaceutical care, patient education, patient counseling and patient adherence.

**PHAR452 Thesis Project - II**
Student is expected to continue collecting scientific literature and carry out the experiments (if applicable) information on the subject on the subject established in Thesis Project I.

**PHAR454 Intoxication Control**
Aims to teach the protection from poisons, management in poisonings, and systemic and local antidotes usage.

**PHAR456 Biological Products**
Aims to teach an adequate background in fundamentals of descriptive, theoretical introduction to biological pharmaceutical products and to provide essential knowledge about biopharmaceuticals and their usage as therapeutic agents.

**PHAR458 Instrumental Analytical Methods**
Aims to generate a general background about theory and give principles of instruments, to develop analytical thinking skills, and to teach the importance of instrumentals in pharmaceutical industry.

**PHAR453 Thesis Project – III**
Student is expected to prepare a thesis report and present both orally and in written form.
**PHAR461 Hospital Pharmacy Practice Experience**
This lecture includes training in hospital pharmacy setting and he/she will be qualified for the exam which will be done by training commission.
**PHAR462 Pharmacy Practice**
This lecture includes training in community pharmacy setting and he/she will be qualified for the exam which will be done by training commission.
**PHAR463 Industrial Practice Experience**
This lecture includes training in pharmaceutical company setting and he/she will be qualified for the exam which will be done by training commission.
**PHAR464 Pharmacy Practice Clerkship**
This lecture includes continued training in community pharmacy setting and he/she will be qualified for the exam which will be done by training commission.
**PHAR466 Industrial Pharmaceutical Clerkship**
This lecture includes continued training in pharmaceutical company setting and he/she will be qualified for the exam which will be done by training commission.
**PHAR465 Hospital Pharmacy Clerkship**
This lecture includes continued training in hospital pharmacy setting and he/she will be qualified for the exam which will be done by training commission.

## 5. Accreditations and Memberships

**YÖDAK**: Higher Education Planning, Evaluation Accreditation and Coordination Council

**YÖK**: Council of Higher Education
https://www.yok.gov.tr/en

**PCN**: Pharmacists Council of Nigeria
https://www.pcn.gov.ng

**FIP**: International Pharmaceutical Federation
https://www.fip.org/about?language=en

**IPSF**: International Pharmaceutical Students Federation
https://www.ipsf.org/

**EPSA**: European pharmaceutical students' associations
https://www.epsa-online.org/

## 6. Important Policies

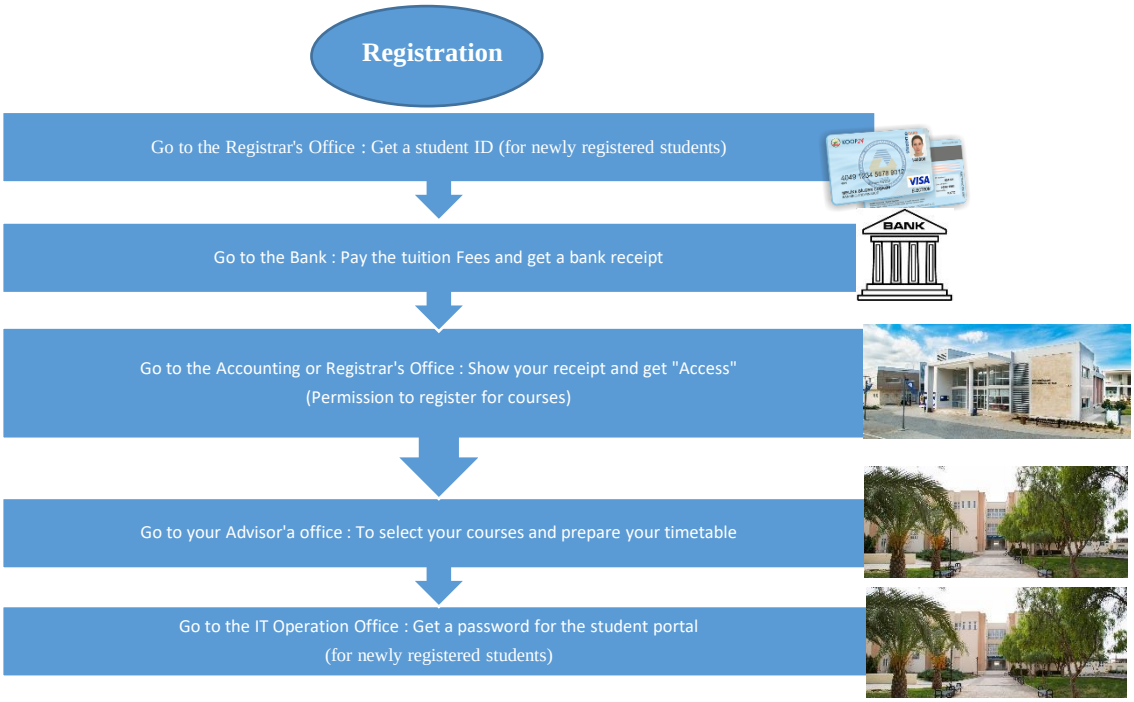
### I. Policies for Course Registration

Students must adhere to the exact registration renewal dates and deadlines as specified in the academic calendar announced by the Rector's Office which can be found at https://www.emu.edu.tr/academiccalendar.

Each student in the Department is assigned an Academic Advisor who assists the student with matters related to scheduling, course selection, registration, and related matters. The academic advisor who is assigned to the student is immediately reflected to the student portal.
Although the advisor plays a key role in the student's progress through University studies, it is ultimately the student's responsibility to meet all University requirements. According to EMU by-laws, students must obtain their advisors' approval for the following transactions:

- Registration,
- Selection of core and elective courses,
- Adding courses to their schedules,
- Dropping courses from their schedules,
- Withdrawing from a course.

These operations are normally initiated by the student using the student portal account and the advisor is notified to confirm via an automatic email message.
Before the classes start each semester, certain days are designated for formal (course registrations accompanied by Advisor) registration, as indicated on the academic calendar. At this time, all newly registered students are advised and given class schedules.




### a) Course Selection

Priorities in course selection are as follows:
(1) Courses with (F), (NG), (U) or (D-) grades.
(2) Courses with (W) grades
(3) Compulsory courses of previous semesters that have not been taken yet.
(4) Compulsory courses of the current semester that have not been registered yet.
(5) Courses from the following semesters
For every semester, the number of specified credit courses of a registered program makes up the semester course load. Non-credit courses are not taken into account in the computation of the course load. However, upon the recommendation of the student advisor and the approval of the Faculty:
(1) a maximum of two courses can be reduced from the normal course load of a semester. In this case, the student must register for the untaken courses at the first semester the courses are being offered.
(2) a student's semester course load can be increased by one course at most. In order to do this,
(A) the student must have a minimum 2.50 Cumulative Grade Point Average (CGPA), or
(B) the student must be a 'High Honour' or 'Honour' student as of the end of the previous academic semester. Students (excluding High Honour students) make additional payments based on the per-credit fees to be applied for the summer semester at the end of the respective academic year, in addition to the tuition fee the students are obligated to pay for each extra course they take during that semester.

### b) Adding or Dropping a Course During Course Registration Period

From the first day of the commencement of the classes until the deadline specified on the academic calendar, students are allowed to change their course schedule by adding a new course or dropping a registered course. These changes must be made upon the recommendation of the student's advisor and approval of the Faculty Dean.

### c) Withdrawing From Courses After Registration

In a semester, a student is allowed to withdraw from two registered courses at most, provided that the student does not get into part-time status. Course withdrawal should be done between

the set dates specified on the academic calendar. Application for withdrawal is done via portal by the student and approved by the academic advisor and the Faculty Dean. A student who withdraws from a course will receive the grade 'W'. This grade is not taken into consideration during the calculation of the CGPA and the GPA, but appears on the transcript.
A student cannot withdraw from a course that was withdrawn before, a course that is repeated (a different course with the same reference code) or a course that has no credit.

### d) Repeating Courses

In some cases, a student may choose to or may be required to take courses that he or she has taken before. The following provisions are applied in repeating a course:
The following provisions are applied in repeating a course:
(1) A student who obtains a (D-), (F), (NG) or (U) grade from a course must register for the course at the next available opportunity.
(2) If the course to be repeated is an elective or has been excluded from the program, the student is required to take another appropriate course specified by the Department.
If a student wishes to improve his/her previously obtained grades, s/he can repeat a course in which s/he previously passed.
The grade obtained from the repeated course takes the place of the previous grade. However, the first grade still appears on the transcript.

### e) Course Registration for Students on Probation or Academic Warnings

**Registration of Students on Probation or Students with Unsatisfactory Academic Status**
Students who are on probation are obliged to repeat failed courses the first semester they become available before registering for the new ones. Students with such condition at Faculty of Pharmacy are allowed to register for three new courses at most and in all other programs they are allowed to register for three new courses at most, on the condition that they do not exceed normal course load. (Students who wish to register in summer school or who have the part-time status are allowed to register only for one new course). A student on academic probation is not allowed to register for a new course if the number of offered previously taken courses with (D-), (F) or (NG) grades fulfill his/her load. Previously registered courses with (W) grades are considered as new courses.
**Registration of Students with Unsatisfactory Academic Status**
In Faculty of Pharmacy, students with unsatisfactory academic status will not be allowed to register for a new course. During registration, these students must first register in the courses from which they received the grades: F, NG or D-. However, in the event of the courses from which (F), (NG) or (D-) grades were obtained not being offered, or the student's course load being under the specified limit, the student can repeat courses from which a (D), (D+) or (C-) grade was obtained until the normal course load is met. Courses with (W) grades are considered as new and cannot be registered.

### f) Late Registration

The first and the last day for registration is announced in the academic calendar. The students need to pay extra fee for late registration. Late registration fees are determined by the Rectors' office in accordance with the principles set concerning this issue. The allowance of the students to register after the late registration date is determined by both the approval of Deans2 and Rectors' office.

### g) Part time Registration

Students who take less than 3/5 of the total credit hours per semester upon the recommendation of the student advisor and consent of the department head/school director are considered as part-time. Students in part-time status cannot withdraw from a course. In the $10^{th}$ semester of M.Pharm program and $11^{th}$ and $12^{th}$ semester of PharmD. Program, the students cannot become part time due to the course loads in the relevant semesters.

## II. Policies for Scholastic Students

Performance of a student is based on a Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA) calculation methods at the end of each semester. Credit received from a course is found by multiplying the credit hours by the coefficient corresponding to the grade received. The GPA is then found by dividing the sum of the credits received from all courses registered during the semester by the total credit hours of the same courses. CGPA is computed by dividing the total credits received from all courses the student has completed since joining the program by the sum of the credit hours of these

courses. In cases when a course is repeated, the last grade is included in the GPA and CGPA computations.
A student is considered successful at the end of a semester, if the Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA) are at least 2.00 out of 4.00.
Students registered to the normal course load of a program in a department and scores a GPA between 3.00 and 3.49 is designated an 'Honor', if the GPA is between 3.50 and 4.00 is designated a 'High Honor'.
Students enrolled in an undergraduate and/or 5-year program whose CGPA'S are specified below are considered as 'successful', 'on probation' or 'unsuccessful'.

| End of Actual Term (EAT) | Successful Student | Students on Probation | Unsuccessful Student |
|---|---|---|---|
| 1st EAT | | | |
| 2nd EAT | CGPA ≥ 1.50 | 1.00 ≤ CGPA < 1.50 | CGPA < 1.00 |
| 3rd EAT | CGPA ≥ 1.50 | 1.00 ≤ CGPA < 1.50 | CGPA < 1.00 |
| 4th EAT | CGPA ≥ 1.50 | 1.00 ≤ CGPA < 1.50 | *** |
| 5th EAT | CGPA ≥ 1.80 | 1.50 ≤ CGPA < 1.80 | CGPA < 1.50 |
| 6th EAT | CGPA ≥ 1.80 | 1.50 ≤ CGPA < 1.80 | CGPA < 1.50 |
| 7th EAT | CGPA ≥ 1.80 | 1.50 ≤ CGPA < 1.80 | CGPA < 1.50 |
| 8th and more EAT | CGPA ≥ 2.00 | 1.80 ≤ CGPA < 2.00 | CGPA < 1.80 |

*End of Actual Term (EAT) refers to the Spring and Fall Semesters (except for the English Preparatory School semesters) a student takes courses within the department's published program of study.

## III. Policies for Academic Evaluation

### a) Examinations

For each course, a minimum of one midterm examination, a final examination, and any number of quizzes/tests are held. The detailed outlines of each course which include the types and the number of examinations, information on the grading system and the relative weights of the examinations are announced by the lecturer in the first session of the course and also posted at students' Moodle account (https://lms23-24fall.emu.edu.tr/login/index.php).

### b) Course Grades / Points

For each course, detailed outlines which also include information on the grading system and the relative weights of the examinations are posted at https://lms23-24fall.emu.edu.tr/login/index.php.

### c) Resit Examinations

Re-sit examinations are administered at the end of both the fall and spring semesters for students who have gained the right to take the final exam on dates specified on the Academic Calendar. Students who fall into the following categories may take the resit examinations:
a) Students who have gained "D-"or "F" from courses taken during the relevant semester.
b) Students who have received an academic warning or who are on unsatisfactory or probational status can re-sit for all courses taken during the relevant semester, except for the ones with an 'NG' grade;

### d) Make-up Examinations

A student who fails to sit for an examination for a valid reason is given a make-up exam. Within three working days after the examination, students who wish to take a make-up must submit a written petition to the course instructor or the course coordinator explaining the reason(s) for his/her request.
Make-up exams for the mid-term exams may take place within the semester. Re-sit exams may also replace make-up exams.

## IV. Policies for Course/Laboratory Attendance

Eastern Mediterranean University and the Faculty of Pharmacy believes that the benefits of academic studies come not only from independent study and the preparation of materials for formal grading, but also from participation in class and laboratory activities. Regular attendance of the Faculty students is therefore appreciated in all courses for which they are registered.

The minimum required rate of attendance to the courses/laboratories is announced to the students with the course outline in the first lecture that is also in the official Moodle account.

For flagrant violation of the spirit of class attendance, the student can be assigned an "NG" grade. A students who has been assigned an "NG" grade does not have the right to take the resit exam for the relevant course.

Students are obliged to fulfill the attendance criteria for both the theoretical and practical sessions of the courses that are announced to them via course outlines.

## V. Policies for Summer School

Summer school is organized mainly to help students with low scholastic achievement. Nevertheless, courses offered during the summer sessions are open to all students and successful students who wish to graduate sooner can also take summer courses.

Maximum of 3 courses with the condition of not exceeding total of 12 credits can be taken during the Summer Semester.

Courses envisaged to be offered during the Summer Semester are announced by the Rector's Office at least four weeks prior to the commencement date of Summer Semester.

Reaching a minimum number of pre-registered students specified by the Rector's Office is required in order to open a course during the Summer Semester.

An extra amount of tuition fee is paid for Summer Semester courses apart from the Spring and Fall semesters tuition fees. The amount to be paid per course is announced by the Rector's Office at least four weeks prior to the commencement date' of Summer Semester.

## VI. Policies for Internships

M.Pharm students must complete 132 working day internship (either in community or hospital pharmacy) before graduation. The students can start their traineeship after they have passed Physiology-1 (MDCN245) course. The total period of traineeship can be practiced during the summer, winter breaks and entire 10th semester.

The total period of traineeship for Pharm. D students is 250 working days that should consist of minimum 132 days for community, and 10 each days for hospital and industrial internships. The traineeships can be practiced during the summer breaks, winter breaks and entire 11th - 12th semesters.

The regulations for traineeship can be accessed on the faculty website (https://pharmacy.emu.edu.tr/en/current%20students/traineeship). For detailed information, contact Senior Instructor Ertugrul Ozbil at office PHAR326 or via ertugrul.ozbil@emu.edu.tr.

## VII. Policies for Thesis Projects

The students should complete thesis projects under Thesis 1 (PHAR451) and Thesis 2 (PHAR452) courses for MPharm program; Thesis 1 (PHAR451), Thesis 2 (PHAR452) and Thesis 3 (PHAR453) courses for Pharm.D program. The detailed regulations for thesis projects can be accessed on the faculty website (https://pharmacy.emu.edu.tr/en/current%20students/rules-and-regulations/graduation-thesis)

## VIII. Policies for Tuition Fees

Undergraduate and graduate studies in Eastern Mediterranean University are charged. Annual tuition fees are determined by the Board of Trustees before the announcement of the entrance exams and announced by the Rector's Office, accordingly.

Students of the associate degree/undergraduate programs are required to pay the semester fees obtained by dividing the annual tuition fees into two equal installments either in total at the beginning of the relevant academic semester or in installments specified in amount and payment date throughout the academic semester, if found suitable by the Board of Trustees.

For more information please visit https://www.emu.edu.tr/fees.

## IX. Student Scholarships Provided by the University

Eastern Mediterranean University provides All-inclusive Scholarships, Tuition Fee Waivers, High Honor Award, Sports Grant, Student Assistantship, Research Assistantship, Discounts, and TRNC Government Scholarship. Detailed information can be accessed on EMU Scholarship Regulations via https://www.emu.edu.tr/en/prospective-students/undergraduate/undergraduate-scholarships/1167.

## 7. Grievance Policy

**Informal Resolution Attempt**:

Students are encouraged to informally resolve academic-related grievances with their faculty advisor within the Faculty of Pharmacy.

**Formal Grievance Filing**:

If an acceptable solution is not reached informally, the student must submit a written grievance to the Dean's office. The formal grievance should include details such as the issue's discovery, a description, evidence, and the desired resolution.

**Dean's Office Evaluation**:

The Dean's office will assess documents and mediate the grievance. Additional information may be requested, and meetings may be arranged.

**Appeal Process**:

If dissatisfied with the Dean's office decision, a formal written appeal can be filled to the Student Affairs Vise Rector's Office. A comprehensive record of the entire process will be kept on file until the student's graduation.

## 8. Student Code of Conduct

It is the fundamental duty of every student to strictly adhere to the following:

Portray a high degree of self-discipline and good conduct at all times;

Respect others' opinions and cultures;

Attend classes punctually and explain and/or produce valid evidence for any absence/tardiness;

Behave responsibly in class and avoid disturbing tutors and fellow students;

Take responsibility for attending assessments at the required date, time and place;

Submit the exceptional/mitigating circumstances documents for consideration within the specified time period and as per the process;

Follow strictly assessments' rules and regulations;

**Basic safety rules in Pharmacy Laboratories:**

Know where laboratory safety facilities, eyewash facilities, and firefighting equipment are;

Never take snacks inside a laboratory;

Do not taste or smell the chemicals;

Proper disposal of trash is essential;

Keep a clean working environment;

Hands should be washed frequently;

Put on a lab coat;

No smoking in the laboratory;

Long hair should never be left open and should be tied back;

Shoes should fully cover the foot. One should never wear sandals or open footwear during lab activities;

Always wear face shields or safety glasses when dealing with dangerous materials and chemicals;

Always wear protective gloves when working with any toxic agent;

When conducting laboratory experiments, always wear a lab coat;

Every chemical substance should be dealt with as though it were hazardous;

No solvent should come into touch with your skin;

All chemical substances must be clearly labeled with the name of the material property;

Never take chemicals or other items out of the lab;

## 9. Code of Conduct of Pharmacist

To serve humanity and to support the profession's ideals and commitments,
To be guided in all dimensions of the life by the highest standards of human conduct,
To apply the full measure of the knowledge and abilities to supporting the health and well-being of individuals,
To always place the needs of all those serve above my personal interests and considerations,
To treat all those serve equally, fairly and with respect, regardless of gender, race, ethnicity, religion, culture,
To protect the confidentiality of personal and health information entrusted,
To maintain the professional knowledge and competence throughout the career,
To support the advancement of knowledge and standards of practice in pharmacy,
To nurture the preparation of future members of the profession,
To use all opportunities to develop collaborative practice with all healthcare professionals in the environment,
Never to act in a manner that is contrary to these vows,

## 10. Graduation

A student is entitled to graduate if he/she:
1) Satisfactorily completes all required courses, laboratory studies, and training; and
2) Attains a sum of credit-hours amounting to at least the minimum required for graduation (…. Credit-hour for M.Pharm. and Pharm.D., respectively).
3) Has a cGPA of not less than 2.0
If at the time of his/her graduation a student has achieved a CGPA of 3.00 or greater, this will be indicated on his/her graduation Diploma and official transcript as follows: students with a CGPA in the range 3.00-3.49 "Honors"; students with a CGPA in the range 3.50-4.00 "High Honors."

## 11. Facilities Provided by the University

### a) Özay Oral Library

Through its vast collection and the services it provides, the library aims to support teaching/instruction and research activities at our university, to meet students' and faculty members' needs for information in their academic programs and scientific research, and to contribute to improved access to information for the whole EMU community and the larger public.
Eastern Mediterranean University Özay Oral Library supports the education and research activities of the university with its materials and information services. The Library houses a collection of more than 160,000 print books, more than 30,000 owned e-books, also more than 280,000 e-books are accessible by database subscriptions, thousands of audio-visuals, more than 30,000 subscription based e-journals and around 50 print periodical subscriptions. The Library has membership in more than 50 Online Databases that allow access to; full-text Journals, Reports, Abstracts, E-Books, E-Theses Reviews, Indicators, Statistical Data, Working Papers, Standards as well as bibliographical information resources.
Check library working hours at https://library.emu.edu.tr/en/about-us/library-hours
**Contact Address:**
Özay Oral Library, Eastern Mediterranean University, Famagusta, 99628, North Cyprus, Mersin 10, Turkey. **Tel:** +90 392 630 1322 **Fax:** +90 392 365 1077
**E-mail:** library@emu.edu.tr **Web:** http://library.emu.edu.tr

### b) Health Center

To protect the physical and mental health of students, to contribute students in taking care of their mental and physical health as conscious individuals are among the aims of the Eastern Mediterranean University Heath Center. Students can benefit from the Health Center by presenting a document proving their identity.
Ear-nose-throat, ophthalmology, gynecology, dermatology, dentistry, and internal medicine services are provided by the University health center (https://www.emu.edu.tr/healthcenter). The working hours of the Health Center are similar to that of the University.

Health reports can be given to students by Health Center doctors in case of necessity and those taken from anywhere else but Eastern Mediterranean University Health Center must be approved and registered by the Health Center for 3 days the latest inland and 10 days the latest overseas starting from the report completion date. When needed, Health Center responsible doctor refers the Eastern Mediterranean University students to the polyclinics under the Ministry of Health and Welfare for medical services that cannot be offered at Health Center. Students who pay insurance premiums can benefit from the consultation and examination (lab, x-rays) services in all polyclinics of hospitals under the Ministry of Health and Welfare free of charge. However, advanced imaging (MRI and CT), drugs and other apparatus required for treatment will be paid by students.

**Address:** Health Center, Eastern Mediterranean University, Famagusta, 99628, North Cyprus, Mersin 10, Turkey **Tel**: +90 392 630 2200 **Fax**: +90 392 630 2928

**E-mail:** aysin.tancer@emu.edu.tr **Web**: http://www.emu.edu.tr/saglikmerkezi/

### c) Psychological Counseling, Guidance & Research Center (PDRAM)

EMU Psychological Counseling Guidance and Research Center (EMU-PDRAM) is the pioneer institution in North Cyprus that offers psychological services at the university level. The Center was founded in 1997 to provide psychological services to Eastern Mediterranean University (EMU) students, later extending its psychological services to EMU staff and their families.

The Center's mission is to provide services that improve performance, cognition and behavior for EMU students.

EMU-PDRAM is located on the ground floor of Health Center. Currently, the team working at EMU-PDRAM consists of six psychologists, a psychiatrist and a social worker. All EMU students can apply for counseling or related psychological services during the academic year.

Psychological services provided by EMU-PDRAM include individual counseling, group counseling, research activities, in-service training programs, and programs targeting to meet the needs of specific groups within the local community.

Psychological services provided by EMU-PDRAM are free of charge.

EMU-PDRAM psychologists adhere to fundamental ethical principles that guide the discipline of psychology. These ethical principles include respect for people's rights and dignity, confidentiality, self-referral, and responsibility. Please visit EMU-PDRAM's website http://pdram.emu.edu.tr for further information about services provided by the center and to reach EMU-PDRAM publications.

EMU-PDRAM psychologists are ready to listen, support, and help you with respect, without prejudice in the process of overcoming your problems.

**Contact Address**: Psychological Counseling, Guidance & Research Center (PDRAM),
Eastern Mediterranean University, Famagusta, 99628, North Cyprus, Mersin 10, Turkey
**Tel**: +90 392 630 2251 **Fax**: +90 392 630 2254 / 2475
**E-mail**: counsel.pdram@emu.edu.tr **Web**: https://pdram.emu.edu.tr

### d) Transportation and Bus Service Facilities

As a campus- city university, Eastern Mediterranean University is fully dedicated to providing efficient and dynamic transportation services to its students 60% of whom reside in different parts of the city. The university transportation services, both on and off the campus, are offered free of charge for our students. Our developed and highly dynamic fleet provides transportation services to various city zones through 7 distinct routes.

Students can benefit from non-stop on-campus ring services scheduled in line with the class hours. For bus service routes and timetable please visit http://transportation.emu.edu.tr/en/bus-services

**Contact Address:** Eastern Mediterranean University, Transportation Services Unit, LMP Sports Complex, Ground Floor, Famagusta, North Cyprus, Mersin 10, Turkey. Tel: +90 392 630 1336 / 1532
Web: http://transportation.emu.edu.tr

### e) Social and Cultural Activities

Social and Cultural Activities Unit organizes various social activities for the students at EMU. As well as providing opportunities for our students to spend their extra-curricular time effectively, the Social and

Cultural Activities Unit has a mission of turning our students into active, creative, social and self-confident individuals. In this respect, concerts, conferences, trips, camps, various sports tournaments, exhibitions and festivals are organized for the students.

**Some of the activities are:**

Spring Festivals, Orientation Days, Sand Sculpture Festival, EMU with Folk Songs, Rock Festival Panel/Discussions with Artists, Cup of Nation Tournaments.

**Contact Address:** Social and Cultural Activities Directorate, Eastern Mediterranean University, Famagusta, 99628, North Cyprus, Mersin 10, Turkey **Tel**: +90 392 630 2719 / 3074
**Fax**: +90 392 630 1249 **E-mail**: activity@emu.edu.tr **Web**: http://activity.emu.edu.tr

### f) Lala Mustafa Paşa (LMP) Sports Complex

EMU Sports Affairs Directorate delivers sports-related services to students. Lala Mustafa Paşa (LMP) Sports Complex provides high quality sports services 6 days a week with the latest equipment located in the studios within the complex.

**Outdoor Sports Areas**

To benefit from our astroturf pitches, the students can make a reservation from the LMP Information Office. Outdoor basketball courts are free of charge, and tennis courts can be rented for a fee from LMP Information Center or Tennis Courts and are open day and night.

**Indoor Sports Areas**

With a capacity of 3500 seats, the LMP Sports Complex boasts 3 SQUASH halls, a JUI-JITSU studio, tartan track and a football pitch, all providing sports services at international standards.

With a mission of spreading the sports activities nationwide, the directorate takes part in national leagues in the fields of volleyball, basketball, athletics, tennis, handball, billiards, chess, wrestling, cycling, table tennis, triathlon and football tennis.

Students representing the university in the leagues are awarded scholarships by the university. The cricket, bowling, darts, swimming, futsal and football teams successfully represent the University in the inter-university tournaments and leagues.

Students wishing to receive further information on taking up sports professionally are always welcome to contact us at our directorate.

**Contact Address:** Sports Affairs Directorate, Eastern Mediterranean University, Famagusta, 99628, North Cyprus, Mersin 10, Turkey. **Tel:** +90 392 630 2302 **Fax:** +90 392 630 2319
**E-mail: spor@emu.edu.tr** **Web:** https://spor.emu.edu.tr/tr

### g) Rauf Raif Denktas Culture and Congress Center

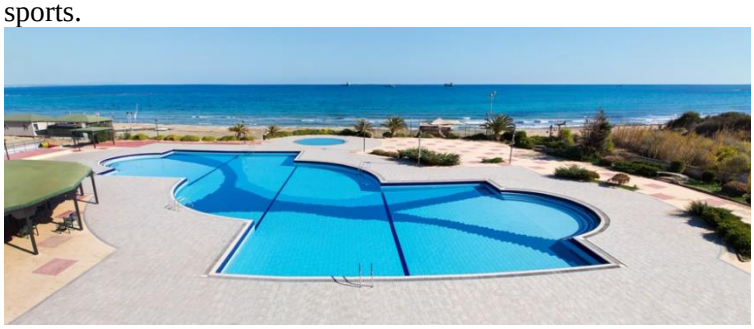
Rauf Raif Denktas Culture and Congress Center is located in the north part of the university campus, 500 meters away from the beach and next to EMU Beach Club in Famagusta. The building houses convention and conference rooms, exhibition halls, museums and art workshops. With a closed area of 5,700 square meters and a capacity seating up to 846 people, the building is the biggest culture and congress center throughout the region. The building also houses 8 conference and meeting rooms.

Theatre and Show Halls, Meeting and Conference Halls, Exhibition Halls, The Foyer and Lobby Services:https://www.emu.edu.tr/en/campus/facilities/rauf-raif-denktas-culture-and-congress-center/services/1349

**Contact Address:** Rauf Raif Denktas Culture and Congress Center, Eastern Mediterranean University, Famagusta, 99628, North Cyprus, Mersin 10, Turkey.
**Tel:** +90 392 630 3809 **E-mail:** ibrahim.genc@emu.edu.tr
**Web**: https://www.emu.edu.tr/en/campus/facilities/rauf-raif-denktas-culture-and-congress-center/services/1349

## h) Eastern Mediterranean University Beach Club

Eastern Mediterranean University is fortunate indeed to have its own private Beach Club situated on the shores of one of the finest beaches in the Mediterranean. Situated within walking distance of the EMU campus, the Beach Club provides students with the opportunities to engage in all types of beach and water sports.



The Beach Club is used throughout the year for beach and pool parties and as a place of relaxation for both staff and students. A full restaurant service is available, and with a large swimming pool and family facilities, students are able to take full advantage of the Mediterranean climate in an exclusive high-class setting.

**Activities include:**

- Annual Sculpture Festival, Turtle Protection and Marine Environment Centre, Windsurfing, Sailing, Canoeing, Diving, Beach volleyball and football

**Location and Contact**

**Tel:** +90 392 630 1111

**E-mail:** info@emu.edu.tr

**Web**: https://www.emu.edu.tr/en/campus/facilities/beach-club/1256