

## FACULTY OF PHARMACY

The Academic program offered by the Faculty of Pharmacy includes general and special pharmaceutical education at the university departments, teaching pharmacies, institutes, hospitals and clinical pharmacies, laboratories, and pharmaceutical works. The faculty seeks to educate its undergraduates by promoting their intellectual development and their progressive accumulation of competence in all fields of modern pharmacy. The quality of the training is outstanding compared to similar Hungarian and European pharmacist training centers. The Faculty takes part in international research activities too. The training material is continuously updated considering the most recent research results. The program provides students with the understanding of the relevant fields of biology, chemistry and physics, medicine, and professional pharmacy subjects. During the course of the program, there is also a focus on developing skills, such as technical knowledge, dexterity, communication and computer skills.

We do not have any specific mentor system; however, the university mentor system (ESN) involves some staff members from the Faculty of Pharmacy.

### Courses Offered for IISMA 2023 Awardees

Course Code	Name of Course	Short Description	Number of ECTS Credits	Max No. of Students
GYTKKAM281	<b>Ethics in Pharmacy</b>	The topic of the Ethics in Pharmacy is the discussing of ethical issues related to pharmaceutical sciences. There are lectures and seminars in this course in order to increase the discussion in this field. Main topics are "Introduction to the subject, Principles of Ethics"; "History of the Ethics and Ethical Codes"; "Ethical issues of death and dying"; "Ethical issues of reproductive medicine"; "Allocation in health care"; "Ethics Codes (in Hungary and internationally)"; "Ethics and Marketing Rules in Pharmacy"; and "Ethical issues in pharmaceutical research".	2	30
GYTKKAM261	<b>Pharmaceutical Analysis</b>	The course focuses on understanding and evaluating the principles and applicability of different quantification methods; analyzing the working principles of measurements based on instrumental analysis; explaining the relationship between the characteristics of the sample and the analytical techniques by exploring correlations; combining the possibilities of analytical problem solving with the needs of pharmaceutical applications and last but not least analyzing the role of instrumental analysis in the production of drugs.	3	30
	<b>Natural Treatments</b>	The course summarizes the procedures that can be used in addition to pharmacotherapy and includes physiotherapy, climate therapy, exercise and massage therapy, nutrition therapy, aromatherapy, homeopathy, healing touch, hand-healing, ayurvedic medicine, alternative manual therapy, sensory and creative therapies, and psycho-somatotherapy.	2	30

GYTKKAM411	<b>Biotechnology</b>	This course summarizes all the recent knowledge on proteins used in medical treatment. The topics include information on the application of molecular biology techniques in production of drugs for therapeutic purposes; give description of the analytical methods how to characterize proteins together with the Hungarian and international quality control of the biotechnological products of pharmaceutical industry; explain the challenges in introduction of biosimilar drugs; concern the development and manufacturing of biopharmaceuticals; elucidate the possibilities of genetic engineering of medicinal plants; demonstrate several new aspects such as the gene therapy, stem cell research or new drug delivery systems.	2	30
GYTKAM321	<b>Veterinary Pharmacy</b>	Introduction to veterinary pharmacy. The course introduces the students to the most common animal diseases and their pharmacological treatment options, the legal requirements for the sale and supply of veterinary medical products, and the business and financial aspects of veterinary products. The course focuses on livestock and pet animals, complementary and alternative therapies, and animal and human health together with food-borne zoonoses.	2	30
GYTKKAM1351	<b>Pharmaceutical Psychology and Communication</b>	The course provides opportunity for students to learn the following skills (1) knowing the basics of therapeutic communication; (2) taking responsibility for communication with the patient, (3) being able to apply assertive communication and active/understanding attention techniques; (4) targeting communication to resolve a conflict; (5) treating patients appropriately and objectively in emotionally difficult situations; (6) informing patients independently about how to use the medication; (7) knowing the difficulties of communicating with patients belonging to special patient groups (in terms of age and gender); (8) being able to have clear, unambiguous self-expression; (9) knowing patient personality types; (10) Recognize the role of the patient's personality in treatment and deal with it appropriately; (11) knowing the psychological background of health and patient behavior; (12) knowing the psychological background of stress management and its relationship to social support; (13) being able to apply stress management techniques in communication.	2	30
GYTKKAM780	<b>Computer Literature Survey</b>	The aim of the subject is to introduce students to the applications of scientific and semi-scientific electronic databases. An introduction is provided the main aspects of literature searches and how to use the most important computational databases available on the internet. Students acquired the ability to search for scientific information relating to their own research interests and activities with a view to the preparation of student scientific research work and later the writing of their thesis. They study how to organize and use downloaded data.	2	10

GYTKKAM482	<b>Clinical Laboratory Practice</b>	The course introduces to the laboratory diagnostic methods, and evaluation of results. The students gain insight into how to obtain biological samples and how to pretest the preparations, the diagnostics of inorganic ions, carbohydrate and lipid metabolism, determination of proteins, rest nitrogen, creatinine, ammonia, urea and bilirubin. The course discusses enzymes and enzyme diagnostics, immunoanalytical methods, endocrinological tests, and DNA based diagnostic tests.	2	5
	<b>Fundamentals of Clinical Therapy</b>	The aim of the course is to learn the risk factors, clinical signs and evidence-based treatment of various common acute/chronic conditions. Gained knowledge might help to prevent, screen medical conditions and understand their pharmacologic and non-pharmacologic treatment options	4	30
GYTKKAM341	<b>Clinical Pharmacy</b>	The aim of the course is to expand the patient-centered pharmaceutical thinking and attitude of the students, by presenting the most important activities of the pharmacists in the inpatient and outpatient settings and emphasizing the differences.	2	30
GYTKKAM471	<b>Ward Pharmacy</b>	During the course, individual pharmacotherapeutic problems are demonstrated and discussed at the patient- bed learning more about the diseases in real clinical situations.	2	5
GYTKKAM352	<b>Pharmaceutical Care</b>	The aim of Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes"- how could be fulfilled to this definitions, this is the topic of this subject. The most common complains and diseases will be discussed what need pharmaceutical contributions; assessment of patient's medication, therapeutic care planning, follow-up evaluation	2	10