

**MEDICAL UNIVERSITY – PLOVDIV**  
**FACULTY OF PHARMACY**

**SYLLABUS**

**IN**

**HISTORY OF PHARMACY**

**Approved by the Department Council - Protocol №8/16.10.2024**

**Confirmed by the Faculty Council - Protocol №9/13.11.2024**

# HISTORY OF PHARMACY

## Syllabus

Discipline	Final exam/ semester	According to the Faculty of Pharmacy curriculum of MU-Plovdiv Academic hours				ECTS	Academic hours in semester	
		I semester						
		Auditorium	Lectures	Practices	Non-auditorium		L	P
History of pharmacy	I	30	30	-	30	2	30	0

**DISCIPLINE:**

History of Pharmacy

**TYPE OF DISCIPLINE ACCORDING TO THE UNIFORM STATE REQUIREMENTS:**

Elective

**LEVEL OF QUALIFICATION:**

Master (M)

**FORMS OF TRAINING:**

Lectures

**YEAR OF TRAINING:**

I course

**DURATION OF TRAINING:**

One semester

**ACADEMIC HOURS:**

30 hours lectures

**TECHNICAL EQUIPMENT APPLIED IN THE TRAINING:**

Multimedia presentations, discussions.

**FORMS OF EVALUATION:**

1. Current assessment during the semesters – writing essays
2. Semester exam (written – test and oral)

**EVALUATION CRITERIA:**

The grade is formed based on the examination – written (test) and oral.

**ASPECTS OF EVALUATION CRITERIA:**

Participation in discussions.

**SEMESTER EXAM:**

Yes (written – test and oral examination)

**STATE EXAM:**

No

**LECTURER:**

Assoc. Prof. Stanislav Georgiev, PhD

Assoc. Prof. Daniela Grekova-Kafalova, PhD

**DEPARTMENT:**

Organisation and Economics of Pharmacy

**ANNOTATION**

The history of pharmacy, though it has a long independent retrospective period of development, is considered nowadays as a part of social pharmacy.

History of pharmacy is a science, studying the development of pharmaceutical knowledge and practice in close relation with human society, development of medicine, chemistry, biology, philosophy and economics, cultural history of nations of all ages and times. Therefore, it is one of the main theoretic disciplines in pharmacy, clarifying the evolution of medicine knowledge in connection with the changing economic conditions, professional role and problems of pharmacy.

**BASIC AIMS OF THE DISCIPLINE**

This short introducing course aims to acquaint pharmacy students in general with the history, theory and practice of pharmacy as a socially significant field of public health.

**EXPECTED RESULTS**

Through this introductory course, the students are given the opportunity to inform themselves regarding the scope and trends of their future professional realisation as specialists in society, as well as about the educational institution and content of each subject included in their course of education.

**LECTURE COURSE PROGRAMME****Course I, semester I**

<b>№</b>	<b>TOPIC</b>	<b>Hours</b>
<b>1</b>	Introduction to the History of pharmacy – essence and subject of the discipline. Basic concepts and periodization. Methods, sources, and objectives.	<b>2</b>

2	Periods in the History of pharmacy. Religious period - pharmacy in primitive society.	2
3	Religious period – pharmacy in antiquity (Ancient Egypt, Mesopotamia, Ancient China and Ancient India).	2
4	Philosophical period – pharmacy in Ancient Greece, Ancient Rome and Byzantium.	2
5	Philosophical period – pharmacy in the Bulgarian lands before the creation of the Bulgarian state (Thracians, Slavs and Proto-Bulgarians).	2
6	Experimental period – pharmacy in the Middle Ages. Medicine knowledge in the Arab Caliphates, Medieval Europe and Medieval Bulgaria.	2
7	Experimental period - European pharmacy in the new society (XVIII-XIX centuries).	2
8	Experimental period - pharmacy in Bulgaria during the Ottoman slavery and the Bulgarian revival.	2
9	Scientific period - modern development of pharmacy. Development of the pharmaceutical industry.	2
10	Pharmacy in Bulgaria after liberation. Provisional rules for the organization of medical management in Bulgaria. First association of pharmacists in Bulgaria.	2
11	Pharmacy in Bulgaria after the Second World War - periods.	2
12	The professional associations of pharmacists in Bulgaria. Their role in the development of pharmacy.	2
13	Pharmaceutical education in Bulgaria. Preparation and postgraduate training of specialists with higher pharmaceutical education.	2
14	Pharmaceutical research and industrial pharmaceutical production in Bulgaria.	2
15	The pharmaceutical profession - opportunities for professional realization. Periods of development of the profession – clinical pharmacy and pharmaceutical care.	2

**TOTAL: 30 hours**

## **LECTURES – THESES**

*I course, I semester*

### **LECTURE No. 1 – 2 hours**

#### **INTRODUCTION TO THE HISTORY OF PHARMACY**

- Importance of teaching
- Subject of the history of pharmacy
- New concepts and periodization
- Methods, sources, tasks
- Pharmacy emblem

**LECTURE No. 2 – 2 hours**  
**PERIODS IN THE HISTORY OF PHARMACY**  
**RELIGIOUS PERIOD**

**PHARMACY IN PRIMITIVE SOCIETY**

- Early forms of religious ideas:
  - o totemism
  - o fetishism
  - o animism
  - o magic

**LECTURE No. 3 – 2 hours**  
**RELIGIOUS PERIOD**

**PHARMACY IN ANTIQUITY**

- Ancient Egypt
- Mesopotamia
- Ancient China
- Ancient India

**LECTURE No. 4 – 2 hours**  
**PHILOSOPHICAL PERIOD**

- Pharmacy in Ancient Greece
  - o Period before Hippocrates - representatives
  - o Hippocratic period
  - o Hellenic (Alexandrian) period
- Pharmacy in Ancient Rome - representatives
- Pharmacy in Byzantium – representatives

**LECTURE No. 5 – 2 hours**  
**PHILOSOPHICAL PERIOD**

- Pharmacy in the Bulgarian lands before the establishment of the Bulgarian state
  - o Thracians
  - o Slavs
  - o proto-Bulgarians

**LECTURE No. 6 – 2 hours**  
**EXPERIMENTAL PERIOD**

**PHARMACY IN THE MIDDLE AGES**

- Pharmacy in the Arab caliphates - representatives
- Pharmacy in Medieval Europe - representatives
- Pharmacy in Medieval Bulgaria - representatives

**LECTURE No. 7 – 2 hours**  
**EXPERIMENTAL PERIOD**

**PHARMACY IN THE MIDDLE AGES**

- European pharmacy in the new society (XVIII-XIX centuries)
  - o Prominent representatives

**LECTURE No. 8 – 2 hours**  
**EXPERIMENTAL PERIOD**

- PHARMACY IN THE MIDDLE AGES
- Pharmacy in Bulgaria during the Ottoman slavery and the Bulgarian revival
  - o The first pharmacy in Bulgaria
  - o The first graduate doctor

- Prominent representatives for the period

### **LECTURE No. 9 – 2 hours**

#### **SCIENTIFIC PERIOD**

##### **MODERN DEVELOPMENT OF PHARMACY**

- Industrial production of drugs - a brief historical overview
  - vitamins
  - hormones
  - sulfonamides
  - antibiotics
- International health and pharmaceutical organizations and their role in harmonizing pharmaceutical legislation
- Scientific schools modern concepts of the role of pharmacy in the health care system - social, hospital, nuclear, industrial and clinical pharmacy. The concept of "pharmaceutical care"

### **LECTURE No. 10 – 2 hours**

#### **PHARMACY IN BULGARIA AFTER LIBERATION**

- Provisional rules for the structure of the medical administration in Bulgaria (1879)
- Prominent representatives: Dr. Dimitar Molov, Ivan Vasilevich Grim, Georgi Atanasovich, Panayot Zhechev, Albert Tegarten, Alexander Naydenovich
- First Association of Apothecaries in Bulgaria - purpose and activity (1884-1890)
- Bulgarian Apothecary Society and Bulgarian Pharmaceutical Society "Galenus" (1890-1906)
- Attempts to create a common Bulgarian pharmaceutical union (1906-1924)

### **LECTURE No. 11 – 2 hours**

#### **PHARMACY IN BULGARIA AFTER WORLD WAR II**

- First period - from 1944 until 1952
- Second period – from 1953 to 1968
- Third period – from 1969 to 1989
- Fourth period – from 1989 to today

### **LECTURE No. 12 – 2 hours**

#### **THE PROFESSIONAL ASSOCIATIONS OF PHARMACISTS IN BULGARIA**

- Professional associations of apothecaries and pharmacists during the period 1922-1944.
- Union of Apothecaries in Bulgaria (1926)
- Bulgarian Pharmacy Cooperative Society

### **LECTURE No. 13 – 2 hours**

#### **PHARMACEUTICAL EDUCATION IN BULGARIA**

- A brief historical overview
- Preparation and postgraduate training of specialists with higher pharmaceutical education

### **LECTURE No. 14 – 2 hours**

#### **PHARMACEUTICAL SCIENTIFIC RESEARCH AND INDUSTRIAL PHARMACEUTICAL PRODUCTION IN BULGARIA**

- Creation of the Scientific Society of Pharmacy and main stages in the development of scientific research
- Internationalization of scientific research on the creation of new medicinal products /MP/
- Clinical trials of the new MPs

- Characteristics of pharmaceutical production in Bulgaria
- Characteristics of the world and Bulgarian market of MP
- Ratio of imported and domestic MPs in volume and value
- Hospital and pharmacy market

**LECTURE No. 15 – 2 hours**

**THE PHARMACEUTICAL PROFESSION - OPPORTUNITIES FOR PROFESSIONAL REALIZATION**

- Periods of development of the profession – clinical pharmacy and pharmaceutical care
- Major differences in the goals and objectives of clinical pharmacy and pharmaceutical care practices
- Modern directions of implementation - narrow specializations in a certain area - pediatric pharmacy, orthopedics, etc.

**BIBLIOGRAPHY**

1. Dimitrova Zl, Georgiev St, Getov I, Stoimenova A, Ivanov K, Madzharov V, Staynova R, Ivanova St, Petkova-Georgieva E, Ognyanov S. History of pharmacy, a handbook for pharmacy students. Tea Design Ltd., Sofia, 2017. ISBN: 978-619-90647-4-0
2. Zebroski, B. A Brief History of Pharmacy: Humanity's Search for Wellness; Taylor & Francis: Milton Park, UK, 2015.
3. Regine Pöttsch, Alain Touwaide, Armelle Debru, Francisco Guerra, The Pharmacy: Windows on History, Editions Roche, 1996
4. Димитрова Зл, Георгиев Ст, Андреевска К, Маджаров В, Грекова Д, Кискинова Р, История на фармацията, Четвърто преработено издание, София, 2016, ТЕА Дизайн ЕООД, ISBN 978-954-91660-9-5
5. Zebroski, B. A Brief History of Pharmacy: Humanity's Search for Wellness; Taylor & Francis: Milton Park, UK, 2015.
6. Апостолов, М., История на медицината и социалното дело, С, БАН, 1994
7. Боева, А., Проблеми на фармацията, 1982, 101 с.82
8. Бойдашев, Д. "фармацевт", 1909, 2
9. Бурмов, А., Известия на българското историческо дружество, кн.21, 1945, 123
10. Василев, В., "фармацевт", 1942, 9
11. Николчев, К., Материали за историята на аптечното дело в България, С., 1939
12. Павлова, В., История на медицината в България, С., 1980, Мед и физк.
13. Рул, Л., Живели някога хора, ИОМИТ ООД, 1996
14. Събев, П., "фармацевт", 1914, 8, 9
15. Скъпи ли са лекарствата, "Аптекарски преглед", 1939
16. "Славянин" 1884, бр.117
17. тодоров, Н., "фармацевт" 1930, 10
18. Търговия с аптекарски ученици, "фармацевт", 1928, 9

19. Устав на аптекарското общество , 1884
20. Устав на Българското аптекарско дружество , 1890
21. Устав на Българското аптекарско кооперативно дружество , 1912
22. Устав на Българското аптекарско дружество , 1920, Победа
23. Устав на Българското аптекарско дружество, 1926, Франклин
24. Устав на БАКД, 1939, София, изменение
25. Устав на Българското фармацевтическо дружество, 1902
26. Устав на Българското фармацевтическо кондиционерско дружество, 1922
27. Устав на Дружеството на българските дрогисти, 1919
28. Устав на аптекарите в България, 1926, Родопи
29. Устав на Съюза на аптекарите в България, 1932
30. "Фармацевт", 1906-1944
31. "Фармацевтически преглед", 1899-1900
32. "Фармацевтически преглед", 1932-1933, Габрово
33. Фармация за фармацевтите, "Дрогист", 1938, 4
34. цел и програма, "Фармацевтически преглед", 1932, 1

### **EXAM TOPICS IN HISTORY OF PHARMACY**

1. Knowledge of medicines in the pre-historic society
2. Knowledge of medicines in the Ancient world – Ancient Egypt
3. Knowledge of medicines in Ancient Greece.
4. Knowledge of medicines in Ancient Rome and Byzantium
5. Knowledge of medicines in the age of Thracians, Slavs and Proto-Bulgarians
6. Pharmacy in the medieval Arab world
7. Pharmacy in the medieval Europe
8. Pharmacy in the medieval Bulgaria (7<sup>th</sup> – 14<sup>th</sup> century)
9. Pharmacy in Bulgaria during the Ottoman rule and Bulgarian Revival
10. Pharmacy in Bulgaria after Liberation
11. European pharmacy in the 19<sup>th</sup> century. The discovery of alkaloids
12. Pharmacy in Bulgaria between the two World Wars (1914 – 1945)
13. Pharmacy in Bulgaria after World War II
14. Pharmacy in the early modern era – the beginnings of the industrial era of medicines – brief historical overview (vitamins, hormones, sulphonamides, antibiotics, etc.)
15. Professional associations of pharmacists in Bulgaria and their role for the development of pharmacy

16. Pharmaceutical education in Bulgaria – brief historical overview. Education and post-graduate education of pharmacists.
17. Modern development of pharmacy – contemporary concepts for the role of pharmacy in the healthcare system – clinical pharmacy. Pharmaceutical care concept.

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