SYLLABUS

HISTORY OF PHARMACY

1. INFORMATION ABOUT PROGRAM

1.1. Higher education institution	UNIVERSITY OF MEDICINE AND PHARMACY OF CRAIOVA
1.2. Faculty	**PHARMACY**
1.3. Department	PHARMACY II
1.4. Study Field	HEALTH
1.5. Study Cycle[1]	BACHELOR'S DEGREE
1.6. Study Program / Qualification	PHARMACY

2. INFORMATION ABOUT DISCIPLINE

2.1. Discipline name			HISTORY OF PHARMACY				
2.2. Discipline code			FAR1216				
2.3. Lecture owner			Andrei BIȚĂ				
2.4. Seminar activities owner			–				
2.5. Academic degree			Lecturer				
2.6. Employment (basic norm / associate)			Basic norm				
2.7. Study Year	**I**	2.8. Semester	**II**	2.9. Discipline type (content)[2]	**SD**	2.10. Discipline status (compulsoriness)[3]	**OD**

3. ESTIMATED TOTAL TIME (hours per semester / teaching activities)

A. VIth SEMESTER

3.1. Number of hours per week	**1**	from which: 3.2. lecture	**1**	3.3. seminar/laboratory	–
3.4. Total hours of the *curriculum*	**14**	from which: 3.5. lecture	**14**	3.6. seminar/laboratory	–
Distribution of time content [hours]					
Study after manual, lecture support, bibliography and notes					**3**
Additional documentation in the library, on the specialty electronic platforms and on the field					**2**
Training of seminars / laboratories, themes, papers, portfolios and essays					**2**
Tutorial					**–**
Examinations					**2**
Other activities: consultations, student's debating circles					**2**
3.7. Total hours of individual study					**11**
3.8. Total hours per semester					**25**
3.9. Number of credits[4]					***1***

4. PRE-CONDITIONS (where applicable)

4.1. of *curriculum*	–
4.2. of competencies	–

5. CONDITIONS (where applicable)

5.1. of lecture development	Lecture room with means of projection / online environment.
5.2. of seminar / laboratory development	–

6. ACCUMULATED SPECIFIC COMPETENCIES

PROFESSIONAL COMPETENCIES	**CP1**. Knowledge of the historical periods in the drug evolution, of the most important personalities and their role in the drug history and pharmacist profession. **CP2**. Consulting and expertise on drug development, from simple remedies to modern products obtained through nano(bio)pharmaceutical technology and genetic engineering.

TRANSVERSAL COMPETENCIES	**CT1**. Autonomy and responsibility: • the acquisition of moral marks, the formation of professional and civic attitudes, allowing students to be correct, honest, non-conflict, cooperative, available to help people, interested in the community development; • to know and apply the ethical principles related to the medico-pharmaceutical practice; • to recognize a problem when it comes out and to provide solutions responsible for solving it. **CT2**. Social interaction: • to have respect for diversity and multiculturalism; • to develop team work skills; • to communicate orally and in writing the requirements, the way of work, the results obtained; • to engage in volunteering, to know the essential issues of the community. **CT3**. Personal and professional development: • to have openness to lifelong learning; • to become aware of the need for individual study as a basis for personal autonomy and professional development; • to capitalize optimally and creatively their own potential in the collective activities; • to use the information and communication technology.

7. OBJECTIVES OF THE DISCIPLINE (emerging from the list of accumulated specific competencies)

7.1. General objective of the discipline	The objective of the discipline is to provide to the IIIrd Year students the informational support for: ▪ understanding the general notions for the history of drug and the profession of pharmacist, in close correlation with the development of human society; ▪ acquiring of some skills, abilities, and values useful in the pharmaceutical practice.
7.2. Specific objectives	▪ acquiring knowledge about the past of the pharmacy profession, dedicated to the discovery, invention, preparation and distribution of drugs.

8. CONTENT

8.1. LECTURE (content units)	No. of hours
1. History of Pharmacy at national and international level: definition, object of study, scientific societies, publications, role in the university education.	1
2. Prehistory. Ancient Egypt. *Urmas*, the remedies maker.	1
3. Mesopotamia and the first female pharmacists.	1
4. Ancient India. Medical schools, brahmins makers of remedies.	1
5. Ancient China. Original pharmacopoeia, *yi-shen*.	1
6. Ancient Greece.	1
7. Hellenistic Period.	1
8. Roman Empire. The first public pharmacy.	1
9. Middle Ages. Western, Byzantine and Arabian pharmacists.	1
10. Modern History (I). Pharmacy during the Renaissance.	1
11. Modern History (II).	1
12. Pharmacy in the XIXth century. Galenic formulations factories.	1
13. XXth century. Industry of pharmaceutical specialties.	1
14. Milestones for the history of pharmacy in Romania.	1

REFERENCES

1. Boussel P. (1949) *Histoire illustrée de la Pharmacie*, Guy le Prat, Paris.
2. Brătescu G. (red.). (1975) *Dicţionar cronologic de medicină şi farmacie*, Ed. Ştiinţifică şi Enciclopedică, Bucureşti.
3. Carată Ana. (2010) *Istoria farmaciei: comparaţii şi schiţe de curs pentru studenţi*, Ed. Tehnoplast Company S.R.L., Bucureşti.
4. Cotrău M. (1995) *Medicamentul de-a lungul vremii*, Ed. Apollonia, Iaşi.
5. Izsák S. (1979) *Farmacia de-a lungul secolelor*, Ed. Ştiintifică şi Enciclopedică, Bucureşti.
6. Lafont O. (red.). (2003) *Dictionnaire d'histoire de la pharmacie, des origines à la fin du XIX^{e} siècle*, Société d'Histoire de la Pharmacie, Édition Communication Santé, Pharmathèmes, Paris.
7. Lipan V. I. (2009) *Istoria farmaciei române în date*, Ed. Farmaceutică, Bucureşti.
8. Popescu H., Mogoşanu G. D., Bejenaru L. E., Bejenaru Cornelia. (2014) *Istoria farmaciei*, ediţia a II-a, Colecţia „Pharmakon", Ed. SITECH, Craiova.
9. Spielmann J., Baicu Graziella (coord.). (1994) *Istoria ştiinţelor farmaceutice în România*, Ed. Medicală Amaltea, Bucureşti.
10. Sprinţeroiu Miruna Luiza, Vasile R. D. (2003) *Farmacia în civilizaţiile omenirii*, Ed. Multi Press International, Bucureşti.

9. CORROBORATING THE CONTENT OF THE DISCIPLINE WITH THE EXPECTATIONS OF REPRESENTATIVES OF THE EPISTEMIC COMMUNITY, PROFESSIONAL ASSOCIATIONS AND REPRESENTATIVE EMPLOYERS IN THE FIELD RELATED TO THE PROGRAM

• The knowledge gained in the history of pharmacy discipline provides support for understanding drug development, from simple remedies to modern products obtained through nano(bio)pharmaceutical technology and genetic engineering.

10. METHODOLOGICAL BENCHMARKS

Forms of activity	Teaching/learning techniques, materials, resources: presentation, interactive course, group work, learning through problems / projects, etc. In case of special situations (alert states, emergency states, other types of situations that limit the physical presence of people), the activity can be carried out online, using computer platforms approved by the Faculty/University. The online education process will be adapted accordingly to ensure the fulfillment of all the objectives provided in the discipline sheet.
Lecture	The following combined methods are used: lecture, debate, problematization. For the online version: lecture, debate, problematization based on materials provided in advance.
Individual study	Before each lecture.

11. RECOVERY PROGRAM

	Place of performance	***Period***	***Person in charge***	***Programming the topics***
Program of consultations	Laboratory of Pharmacognosy / online environment	The last two weeks	Andrei Biţă Lecturer, PhD	According to the discipline schedule

12. ASSESSMENT

Form of activity	**Forms of assessment**	**Methods of assessment**	**Percentage of the final grade**
Lecture	Written	Verification (written) / single- and multiple-choice system using the computer platform in the online version	80%
Periodical verifications			10%
Lecture attendance			10%
Minimum performance standard			
▪ Basic notions and knowledge about the past of the pharmacist profession: the evolution of medicines, from simple remedies to modern products obtained through nano(bio)pharmaceutical technology and genetic engineering.			

13. PROFESSIONAL COUNSELING AND GUIDANCE PROGRAMS

Professional counseling and guidance programs (2 hours/month)		
Time programming	***Place of performance***	***Person in charge***
Last Friday of every month, between 12^{00}–14^{00}	Laboratory of Pharmacognosy	Andrei Biţă Lecturer, PhD

Note:
1) Study cycle – choose one of the variants: B (bachelor's degree, license) / M (master) / PhD (*philosophiae doctor*, doctorate).
2) Type (content) – choose one of the variants:
   ▪ for the Bachelor's level: FD (fundamental discipline) / DF (discipline from the field) / SD (specialty discipline) / CD (complementary discipline);
   ▪ for the Master's level: DD (discipline of deepening) / DS (discipline of synthesis) / DAK (discipline of advanced knowledge).
3) Discipline status (compulsoriness) – choose one of the following options: ComD (compulsory discipline) / OD (optional discipline) / FacD (facultative discipline).
4) One credit is equivalent to 25 hours of study (didactic activities and individual study).
5) A bonus for attendance may be granted.
6) Of the five professional competences (those that go into the transcript of records) the ones in which the discipline fall are chosen.
7) Transversal competences are three and are written from C6–C8: C6. Autonomy and responsibility; 7. Social interaction; 8. Personal and professional development.