

SYLLABUS

POISONOUS PLANTS

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	POISONOUS PLANTS						
2.2. Discipline code	FAR4211						
2.3. Lecture owner	Ludovic Everard BEJENARU						
2.4. Seminar activities owner	–						
2.5. Academic degree	Associate Professor						
2.6. Employment (basic norm / associate)	Basic norm						
2.7. Study Year	IV	2.8. Semester	VIII	2.9. Discipline type (content) ²	SD	2.10. Discipline status (compulsoriness) ³	OD

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

A. VIIIth 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 <i>curriculum</i>	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 <i>curriculum</i>	Students should have knowledge of pharmaceutical botany, cell biology, anatomy, physiology, pharmacognosy, organic chemistry.
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 toxic substances of plant origin, from a chemical and toxicological point of view (with special regard to symptomatology and antidotes). CP2. Consultancy and expertise on the identification of poisonous plant species (botanical and toxicological diagnosis).
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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 IVth Year students the informational support for: - understanding the general notions on poisonous plants; - acquiring of some skills, abilities, and values useful in the pharmaceutical practice.
7.2. Specific objectives	- acquiring knowledge about poisonous plants, with regard to origin, pharmacognostic characterization, toxicological implications (intoxication symptoms, antidotes); - knowing the pharmaceutical importance of some poisonous plants.

8. CONTENT

8.1. LECTURE (content units)	No. of hours
1. Background.	1
2. Poisonous plants from spontaneous flora.	1
3. Grown poisonous plants.	1
4. Ornamental poisonous plants.	1
5. Plants causing dermatitis.	1
6. Plants containing toxalbumins.	1
7. Allergenic plants.	1
8. Photosensitizing plants.	1
9. Toxicity of aromatic plants.	1
10. Food hazards.	1
11. Plants causing addiction.	1
12. Considerations on poisonous plants from the flora of Romania.	1
13. Plants in legal toxicology. Conduct in intoxication by poisonous plants.	1
14. Legislation on poisonous plants in Romania.	1

REFERENCES

1. Acamovic T., Stewart C. S., Pennycott T. W. (eds). (2004) <i>Poisonous plants and related toxins</i> , CABI Publishing.
2. Baconi Daniela. (2005) <i>Toxicomanii. Note de curs (februarie 2002–decembrie 2005)</i> , Ed. Tehnoplast Company S.R.L., București.
3. Bruneton J. (2005) <i>Plantes toxiques. Végétaux dangereux pour l'homme et les animaux</i> , 3 ^e édition, revue et augmentée, Lavoisier Tec & Doc, Paris.
4. Burrows G. E., Tyrl R. J. (2006) <i>Handbook of toxic plants of North America</i> , Blackwell Publishing, Oxford.
5. Debelmas Anne-Marie, Delaveau P. (1983) <i>Guide des plantes dangereuses</i> , 2 ^e édition, Maloine S.A. Editeur, Paris.
6. Frohne D., Pfänder H. J. (1982) <i>Giftpflanzen. Ein Handbuch für Apotheker, Ärzte, Toxikologen und Biologen</i> , Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart.
7. Hanganu Daniela, Popescu H. (2002) <i>Plante toxice</i> , Ed. Medicală Universitară „Iuliu Hațieganu”, Cluj-Napoca.
8. Nelson L. S., Shih R. D., Balick M. J. (2007) <i>Handbook of poisonous and injurious plants</i> , 2 nd edition, Springer-Verlag, The New York Botanical Garden.
9. Wagstaff D. J. (2008) <i>International poisonous plants checklist: an evidence-based reference</i> , CRC Press, Taylor & Francis Group.
10. Zanoschi V., Turenschi E., Toma M. (1981) <i>Plante toxice din România</i> , Ed. Ceres, București.

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 acquired in the poisonous plants discipline provides support for the understanding of toxic substances of plant origin, from a chemical and toxicological point of view (symptomatology, antidotes), as well as for the identification of poisonous vegetal species.

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

	<i>Place of performance</i>	<i>Period</i>	<i>Person in charge</i>	<i>Programming the topics</i>
Program of consultations	Laboratory of Pharmacognosy / online environment	The last two weeks	Ludovic Everard Bejenaru Associate Professor, PhD	According to the discipline schedule

12. ASSESSMENT

Form of activity	Forms of assessment	Methods of assessment	Percentage of the final grade
<i>Lecture</i>	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 toxic plants: provenance, pharmacognostic characterization, toxicological implications (symptomatology of intoxications, antidotes).			

13. PROFESSIONAL COUNSELING AND GUIDANCE PROGRAMS

Professional counseling and guidance programs (2 hours/month)		
<i>Time programming</i>	<i>Place of performance</i>	<i>Person in charge</i>
Last Friday of every month, between 12 ⁰⁰ –14 ⁰⁰	Laboratory of Pharmacognosy	Ludovic Everard Bejenaru Associate Professor, PhD

Note:

- Study cycle – choose one of the variants: B (bachelor's degree, license) / M (master) / PhD (*philosophiae doctor*, doctorate).
- 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).
- Discipline status (compulsoriness) – choose one of the following options: ComD (compulsory discipline) / OD (optional discipline) / FacD (facultative discipline).
- One credit is equivalent to 25 hours of study (didactic activities and individual study).
- A bonus for attendance may be granted.
- Of the five professional competences (those that go into the transcript of records) the ones in which the discipline fall are chosen.
- Transversal competences are three and are written from C6–C8: C6. Autonomy and responsibility; 7. Social interaction; 8. Personal and professional development.