



PA 7.5.1 SYLLABUS

RED:	02
DATA:	20.12.2013
PAG. 1/3	

Approved

At the Council meeting of Faculty of
Pharmacy
Minutes No. 4 of 12.06.2014

Dean of Faculty of Pharmacy
PhD, associate professor

_____ N. Ciobanu

Approved

At the meeting of the Chair of
Pharmacognosy and Pharmaceutical Botany
Minutes No. 15 of 05.06.2014

Head of Chair,
PhD, professor

_____ A. Nistreanu

SYLLABUS FOR Vth YEAR STUDENTS OF FACULTY OF PHARMACY

Name of the course: **POISONOUS PLANTS**

Code of the course: **S09O089**

Type of course: **Compulsory**

Total number of hours – 56

lectures 14 hours, practical classes 42 hours

Number of credits provided for the course: **3**

Lecturers teaching the course: **Anatolie Nistreanu, PhD, associate professor;**
Anna Benea junior lecturer.

Chisinau, 2014



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PAG. 1/3

Aim of the course:

To provide pharmacist students with the whole set of knowledge necessary to initiate them in this new field of study and represent equally an instrument of information and work in pharmacies, medical offices and units specialized in prevention and first aid in plants poisoning.

The main content of the course

During the studies at the pharmacy the students acquire knowledge of Pharmaceutical botany, then at the Pharmacognosy, they have the occasion to find out that a part of the plant (aerial parts, leaves, flowers, rhizomes, roots, tubers, fruits) is toxic and lethal, beyond the quantities recommended for the therapeutic effects. Retaken at Toxic Plants, this knowledge is improved and completed with the chemical compounds and the causes of poisoning; the symptomatology characteristic to the antidotes and methods applied for the chemical toxicological analysis.

In conclusion the specialist in the field of drugs (medicines), the doctor's adviser concerning the prescription of remedies, should contribute to the identification and even to the treatment of intoxication as a physician.

A. Lectures:

No.	Theme	Hours
1.	General knowledge about poisonous plants. Classification of toxins depending on their toxicity. Mechanisms of toxic protection. Poisonous plant organs. Features of toxic effect of plant poisons. First aid and prevention in case of plant poisoning. Protection and rational use of poisonous plants. Main toxic substances.	2
2.	Plants containing alkaloids Field horsetail, european yew, autumn crocus, poison-hemlock, aconite, honeylocust, deadly nightshade, henbane, Jimson weed.	2
3.	Scopolia, oil plant, bittersweet nightshade, hemp, opium poppy, great globe thistle, hollowroot, white hellebore, greater celandine.	2
4.	Birthwort, white bryony, golden rain, dog's tongue, tobacco, ergot. Plants containing heterosides. Yellow foxglove, lily of the valley, treacle-mustard.	2
5.	Oleander, bitter almond, dwarf elder. Plants containing saponosides. Soapwort, cuckoopint, herb paris, water arum, Solomon's seal, wild privet.	2
6.	Plants containing essential oils. Swallow-wort, savin juniper, tansy, water dropwort, white dittany, marsh labrador tea. Plants containing phenols. Sosnowsky's hogweed, hop, sweet clover.	2
7.	Male fern, pulsatilla, wolf 's milk. Plants of different chemical composition. Mezereon, cursed buttercup, bracken, St John's wort, European mistletoe, cowbane.	2
	Total	14

B. Practical lessons:

No.	Theme	Hours
1.	Chemical classification of plant chemical compounds.	3



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PAG. 1/3	

2.	General knowledge about plant poisoning. Classification of toxins depending on their toxicity. Mechanisms of toxic protection. Poisonous plant organs. Features of toxic effect of plant poisons. First aid and prevention in case of plant poisoning. Protection and rational use of poisonous plants. Main toxic substances.	3
3.	Plants containing alkaloids. Field horsetail, european yew, autumn crocus, poison-hemlock, aconite, honey-locust.	3
4.	Deadly nightshade, henbane, Jimson weed, scopolia, oil plant, bittersweet nightshade.	3
5.	Hemp, opium poppy, great globe thistle, hollowroot, white hellebore, greater celandine.	3
6.	Birthwort, white bryony, golden rain, dog's tongue, tobacco, ergot.	
7.	Test paper.	3
8.	Plants containing heterosides. Yellow foxglove, lily of the valley, treacle-mustard, oleander, bitter almond, dwarf elder.	3
9.	Plants containing saponosides. Soapwort, cuckoopint, herb paris, water arum, Solomon's seal, wild privet.	3
10.	Plants containing essential oils. Swallow-wort, savin juniper, tansy, water dropwort, white dittany, marsh labrador tea.	3
11.	Plants containing phenols. Sosnowsky's hogweed, hop, sweet clover, male fern, pulsatilla, wolf 's milk.	3
12.	Plants of different chemical composition. Mezereon, cursed buttercup, bracken, St John's wort, European mistletoe, cowbane.	3
13.	Test paper.	3
14.	Colloquium.	3
	Total	42

Recommended literature

A. Compulsory:

1. Course of lectures.
2. Hanganu D., Popescu H. Plante toxice. Editura Medicală Universitară "Iuliu Hațieganu". Cluj-Napoca, 2002. – 190 p.
3. Орлов Б. Н., Гелашвили Д. Б., Ибрагимов А. К. Ядовитые животные и растения. М. «Высшая школа», 1980.

B. Additional:

1. Becker G. Plantes toxiques, Ed. Grund, Paris, 1984.
2. Cotrău M. Otrava și viața. Ed. Fundației „Chemarea”, Iași, 1993.
3. Grigorescu Em., Ciulei I., Stănescu U. Index fitoterapeutic. Ed. Medicală, București 1986.
4. Zanoschi V., Turenschi E., Toma M. Plante toxice din România. Editura Ceres, București, 1981. – 210 p.
5. Андреев В. Н. Ядовитые растения Молдавии. Государственное издательство Молдавии, 1949.
6. Internet.

Language of study: Romanian