**Thematic plan of independent work of the student
in the discipline "Pharmacognosy"
for students of the educational program
of the specialist in the specialty 33.05.01 Pharmacy,
direction (profile) Pharmacy,
form of study full-time
for the 2023-2024 academic year**

№	The topic of independent work	Hours (academic)
1.	History of the development of pharmacognosy.[1] Brief historical sketch of the development of pharmacognosy. The main stages of study and use of medicinal plants in world medicine.[2]	2
2.	System of standardisation of medicinal plant raw materials.[1] Standardisation of medicinal plant raw materials. Normative documentation and its categories. Structure of pharmacopoeial article. Requirements of ND to the quality of medicinal plant raw materials.[2]	2
3.	Raw material base of medicinal plants.[1] Raw material base of medicinal plants. Creation of domestic raw material base. Current state of collection of wild and cultivated plants. Import and export of medicinal plant raw materials.[2]	2
4.	Cultivation of medicinal plants.[1] Cultivation of medicinal plants. Methods of influencing medicinal plants to increase their productivity. Examples. Introduction of medicinal plants.[2]	2
5.	Variability of chemical composition of plants in the process of ontogenesis and under the influence of anthropogenic factors.[1] Variability of chemical composition of medicinal plants in the process of ontogenesis, under the influence of environmental factors. Examples. Influence of anthropogenic factors on the quality of medicinal plants.[2]	2
6.	Identification of new medicinal plants.[1] Methods of identification of new medicinal plants. Study and use of experience of folk medicine. Mass chemical examination of plants, chemical screening and phylogenetic principle in the isolation of medicinal plants.[2]	2
7.	Chemical analysis of medicinal plants.[1] Methods of chemical analysis of biologically active substances of medicinal plant raw materials (qualitative analysis of medicinal plant raw materials, chromatography, titration, spectrophotometry).[2]	2
8.	Vitamins.[1] Medicinal plants and raw materials containing vitamins.[2]	3
9.	Fats and fatty oils.[1] Medicinal plants and raw materials containing fats and fatty oils.[2]	3
10.	Polysaccharides.[1] Medicinal plants and raw materials containing polysaccharides.[2]	3
11.	Essential oils.[1] Medicinal plants and raw materials containing terpenoids.[2]	8
12.	Resins and balsams.[1] Medicinal plants containing resins and balsams.[2]	2
13.	Alkaloids.[1] Medicinal plants and raw materials containing alkaloids.[2]	10

14.	Glycosides. [1]Medicinal plants and raw materials containing glycosides. [2]	4
15.	Simple phenols. [1]Medicinal plants and raw materials containing simple phenols. [2]	4
16.	Anthracene derivatives. [1] Medicinal plants and raw materials containing anthracene derivatives. [2]	5
17.	Flavonoids. [1] Medicinal plants and raw materials containing flavonoids. [2]	10
18.	Coumarins.[1] Medicinal plants and raw materials containing coumarins. [2]	2
19.	Lignans.[1] Medicinal plants and raw materials containing lignans. [2]	2
20.	Tannins.[1] Medicinal plants and raw materials containing tannins. [2]	4
21.	Medicinal raw materials of animal origin and natural products. [1] Snake venom. Medical leeches. Antlers. Mumie. Spermaceti. Lanolin. Honey bee products: bee venom, apilac, propolis.[2]	5
22.	Medicinal Collections.[1] Collections. of medicinal plants. Medicinal plants and raw materials included in the collection according to the prescription of M.I. Zdrenko: casatik yellow, zopnik prickly, silver lupchatka, wormwood, sage Ethiopian.[2.]	2
	Total	81

[1] -Subject
[2] - essential content (if necessary)

Considered at the meeting of the department of pharmacognosy and botany "26" May 2023, protocol No 10

Head of the Department   A.V. Yanitskaya