



# MEDICAL UNIVERSITY OF PLOVDIV

## FACULTY OF PHARMACY

### DEPARTMENT OF PHARMACOGNOSY AND PHARMACEUTICAL CHEMISTRY

Protocol № 4/02.07.2024

#### CURRICULUM FOR LECTURES OF PHARMACOGNOSY PART II (VII semester) 2024/2025

№	TOPIC	HOURS
1.	Terpenes - classification, biogenesis, general description and examples of different types of monoterpenes and sesquiterpenes.	3
2.	Essential oils - classification, general description, effect and application. Herbal drugs and essential oils which contain mainly linear, one- and bicyclic monoterpenes, sesquiterpenes. Semisynthetic substances of monoterpenes.	3
3.	Essential oils - herbal drugs and essential oils which contain mainly aromatic monoterpenes and derivatives of phenylpropane.	3
4.	Diterpenes, triterpenes, tetraterpenes, polyterpenes and herbal drugs which contain them. Resins and balsams - general description, representatives and plant sources. Semisynthetic substances and medicinal products.	3
5.	Monoterpenoids - iridoids. General description and classification. Carbocyclic iridoids, secoiridoids, valepotriates and medicinal plants which contain them. Sesquiterpenoids - sesquiterpene lactones. General description, classification, effect, application and herbal drugs which contain them. Semisynthetic substances and medicinal products.	3
6.	Triterpenoids - sterols. Biogenesis, general description and classification. Sterols and herbal drugs which contain them. Medicinal products based on sterols. Cardiac glycosides - general description, classification, effect and application. The structure - activity relationship. Medicinal plants which contain cardenolides - Digitalis and Strophanthus type. Semisynthetic substances and medicinal products.	3
7.	Saponins - general description, properties and classification. Steroidal saponins, triterpenoid saponins and herbal drug which contain them. Semisynthetic substances and medicinal products based on sterols and steroidal saponins.	3
8.	Alkaloids - classification, biogenesis and general description. Herbal drugs which contain amides and alkaloids with nitrogen atom in the side-chain. Semisynthetic substances and medicinal products.	3
9.	Pyrrolidine, piperidine, pyridine and tropane alkaloids and herbal drugs which contain them. Semisynthetic substances and medicinal products.	3
10.	Quinoline and quinolizidine alkaloids and herbal drugs which contain them. Semisynthetic substances and medicinal products.	3
11.	Isoquinoline alkaloids – biogenesis, classification and herbal drugs which contain them. Semisynthetic substances and medicinal products.	3
12.	Indole alkaloids – biogenesis, classification and herbal drugs which contain them. Semisynthetic substances and medicinal products.	3
13.	Imidazole, purine and steroidal alkaloids and herbal drugs which contain them. Semisynthetic substances and medicinal products.	3
14.	Herbal drugs and medicinal products used for diseases of the respiratory tract, gastrointestinal tract, liver and biliary tract. Herbal drugs and medicinal products used for urinary disorders and cardiovascular diseases.	3
15.	Herbal drugs and medicinal products which affect the nervous system. Herbal drugs and medicinal products used for cancer treatment and for external use.	3

Head of the Department: .....

/ Assoc. Prof. K. Ivanov, PhD /