CALENDAR-THEMATIC PLAN
PRACTICAL CLASSES
on Pharmaceutical Botany Module 1
for higher education students of the 2nd course
specialty 226 «Pharmacy, industrial pharmacy»
Фм21(4.10д)англ 01-14

(spring semester, 2021-2022 academic years)

№з/п	Date	The topic of the lesson	Volume in hours, type of occupation	Evaluation system nowledge, marks	
				min	max
Content module 1. *Structural functional and chemical peculiarities of plant cells. Their diagnostic features*					
1.	*14.02-25.02*	Fundamentals of botanical microtechnology. Investigation of plant cell structures that have a diagnostic value in a microscopic analysis of plant raw material: plastids, crystalline inclusions, storage products. **Textbook p. 17-32.**	4 pr.cl		
2.	*28.02-11.03*	Investigation of plant cell structures having a diagnostic value in a microscopic analysis of plant material: cell wall. **Textbook p. 17-32. Individual work.**	4 pr.cl.	**3**	**5**
		Control of content module 1 (*Plant cell*) **Computer test for the "Krok 1" exam (topics 1-2)**		**3** **1.5**	**5** **2.5**
		Total CM 1:		**7.5**	**12.5**
Content module 2. *Structural functional and chemical peculiarities of plant tissues. Their diagnostic features*					
3.	*14.03-25.03*	Plant tissues and their classification. The structure and location of meristematic, covering, secretory and basic tissues. **Textbook p. 37-52, 54-56. Test control**	4 pr.cl	**3**	**5**
4.	*28.03-8.04*	Structure, function and location of mechanical and conductive tissues. Conductive bundles. **Textbook p. 52-54, 56-61.**	4 pr.cl		
		Control of content module 2 (*Plant tissues*) **Computer test for the "Krok 1" exam (topics 3-4)**		**3** **1.5**	**5** **2.5**
		Total CM 2:		**7.5**	**12.5**
Content module 3. *Morphology and anatomy structure of plant vegetative organs. Their functions, taxonomy and diagnostic features*					
5.	*11.04-22.04*	Anatomy of the root. Anatomy of the stem and rhizome of grassy monocots. **Textbook p. 73-79, 94-96. Test control**	4 pr.cl.	**3**	**5**
6.	*25.04-6.05*	Anatomy of the stem and rhizomes of grassy monocots. Anatomy of the arboreal plants' stem. **Textbook p. 97-101.Test control**	4 pr.cl.	**3**	**5**
7.	*9.05-20.05*	Anatomy of the leaf. **Textbook p. 116-121.** **Test control of the topic «Anatomy of plant vegetative organs»** **Independent educational-research work «Microscopic analysis of the axial plant organ»** **Computer control «Anatomy of plant vegetative organs»** (*KROK tests*)	4 pr.cl.	**3** **3** **1.5**	**5** **5** **2.5**
8.	*23.05-3.06*	Morphology of the vegetative organs (root, shoot, leaf and its parts). **Textbook p. 68-72, 82-93, 104-115.Test control**	4 pr.cl.	**3**	**5**
9.	*6.06-17.06*	Summary of the Content module 3. **Test control**	4 pr.cl.		
		Control of content module 3 (*Morphology and anatomy of plant vegetative organs*) **Computer test for the "Krok 1" exam (topics 5-9)**		**3** **1.5**	**5** **2.5**
		Total CM 3:		**21**	**35**
18.	*20.06-1.07*	**Module test**		**24**	**40**
		Summary		**60**	**100**

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