

# GAUTAM COLLEGE OF PHARMACY

DISTT. HAMIRPUR 177001 (H.P)

## LESSON PLAN

**Course: D. Pharmacy 1st Year**

**Session-2024-2025**

**Subject Name: Pharmacognosy**

**Subject Code: ER20-13T**

**Total teaching hours allocated by PCI= 75 hrs**

**Name of faculty: Ms. Dipali Rana**

**Duration of topic: 1 hr**

**Scope:** This course is designed to impart knowledge on the medicinal uses of various drugs of natural origin. Also, the course emphasizes the fundamental concepts in the evaluation of crude drugs, alternative systems of medicine, nutraceuticals and herbal cosmetics.

Ch.no	Topic No	Title of Topic	Total no. of hours	Scheduled Date	Pedagogy	Assignment	Objectives and Learning Outcomes	Remarks
Unit-1	1	Definition and History of Pharmacognosy	1	3/09/2024 to 04/09/2024	Hand written Notes	Assignment on market preparation of various dosage forms of Ayurvedic, Unani, Siddha, Homeopathic	After completion of the topic the student will be able to the concepts of history, present and scope of Pharmacognosy	
	2	Present status of Pharmacognosy	1		Hand			

					<b>written Notes</b>	and their labelling requirements		
<b>Unit-2</b>	3	<b>Classification of drug:</b> Alphabetical and taxonomical	1	<b>5/09/2024 to 12/09/2024</b>	<b>Hand written Notes</b>		After completion of the topic the student will be able to the concepts of Classification of drug: Alphabetical, Taxonomical, Morphological, Pharmacological, Chemotaxonomical classification	
		<b>Tutorial no. 1</b>	<b>1</b>					
	4	Morphological and Chemical	1					
	5	Pharmacological	1					
	6	Chemo- taxonomical	1					
		<b>Tutorial no. 2</b>	<b>1</b>	<b>13/09/2024</b>				
<b>Unit-3</b>	7	<b>Quality control of crude drugs:</b> Definition of crude drug	1	<b>17/09/2024 to 27/09/2024</b>	<b>Hand written Notes</b>		After completion of the topic the student will be able to the concepts of Quality control of crude drugs and Different methods of adulteration of crude drug	
	8	Difference between organised drug and unorganised drug	1					
	9	Adulteration	1					
		<b>Tutorial no. 3</b>	<b>1</b>	<b>20/09/2024</b>				
	10	Adulteration of crude drug	1					

	11	Different method of adulteration	1					
	12	Evaluation of crude drug	1					
		<b>Tutorial no. 4</b>	<b>1</b>	<b>27/09/2024</b>				
<b>Unit-4</b>	13	<b>Brief outline of occurrence, distribution, isolation, identification tests, therapeutic activity and Pharmaceutical application : alkaloids</b>	1	<b>01/10/2024 to 18/10/2024</b>	<b>Hand written Notes</b>		After completion of the topic the student will be able to the concepts of Brief outline of occurrence, distribution, isolation, identification tests, therapeutic activity and Pharmaceutical application : Alkaloids, terpenoids, glycosides, volatile oil, tannins, resins	
	14	occurrence, distribution, isolation, identification tests, therapeutic activity and Pharmaceutical application of terpenoids	1					
	15	occurrence, distribution, isolation, identification tests, therapeutic activity and Pharmaceutical application of glycosides	1					
		<b>Tutorial no. 5</b>	<b>1</b>					
	16	Occurrence, distribution, isolation, identification tests, therapeutic activity and pharmaceutical application of volatile	1					

		oils						
	17	Occurrence, distribution, isolation, identification tests, therapeutic activity and pharmaceutical application of tannins	1					
	18	Occurrence, distribution, isolation, identification tests, therapeutic activity and pharmaceutical application of resins	1					
		<b>Tutorial no. 6</b>	<b>1</b>	<b>18/10/2024</b>				
<b>Unit-5</b>	19	<b>Biological source, chemical constituents and therapeutic efficacy of the following categories of crude drugs.</b> <b>Laxatives:</b> Aloe, Castor oil	1	<b>22/10/2024 to 27/01/2025</b>	<b>Hand written Notes</b>	Assignment on market preparation of various herbal formulation and herbal cosmetics, indication, and their labelling requirements.	After completion of the topic the student will be able to the concepts of Biological source, chemical constituents and therapeutic efficacy of the following categories of crude drugs.	
	20	Biological source, chemical constituents and therapeutic use Ispaghula, Senna	1					
	21	<b>Cardiotonic:</b> Digitalis, Arjuna	1					
		<b>Tutorial no. 7</b>	<b>1</b>	<b>25/10/2024</b>				
	22	<b>Carminatives and G.I. regulators:</b> Coriander, Fennel, Cardamom	1					
	23	Ginger, clove, Black pepper	1					

	24	Asafoetida , nutmeg , cinnamon	1					
	25	Astringents -Myrobalan , Black catechu , Pale catechu	1					
	26	Drugs acting on nervous system - Hyoscyamus , Belladonna	1					
	27	Ephedra , opium ,tea leaves	1					
		<b>Tutorial no. 8</b>	<b>1</b>	<b>08/11/2024</b>				
	28	Coffee seeds , coca	1					
	29	Anti- hypertensive - Rauwolfia	1					
	30	Anti- tussive - vasaka , tolu balsam	1					
	31	Anti - rheumatics - Colchicum seed	1					
	32	Anti - tumour - Vinca , podophyllum	1					
	33	Antidiabetics - Pterocarpus , Gymnema	1					
		<b>Tutorial no. 9</b>	<b>1</b>	<b>22/11/2024</b>				
	34	Diuretics - Gokhru , Punarnava	1					
	35	Anti - dysenteric - ipecacuanha	1					
	36	Antiseptics and	1					

		disinfectants - Benzoin , myrrh						
		<b>Tutorial no. 10</b>	<b>1</b>	<b>29/11/2024</b>				
37		Neem , Turmeric	1					
38		antimalarials - Cinchona , artemisia	1					
39		Oxytocic - ergot	1					
		<b>Tutorial no. 11</b>	<b>1</b>	<b>13/12/2024</b>				
40		Vitamins - Cod liver oil	1					
41		shark liver oil	1					
42		Enzymes - Papaya , Diastase	1					
		<b>Tutorial no. 12</b>	<b>1</b>	<b>20/12/2024</b>				
43		Pancreatin , Yeast	1					
44		Pharmaceutical aid - Kaolin , Lanolin	1					
45		Beeswax , acacia	1					
		<b>Tutorial no. 13</b>	<b>1</b>	<b>27/12/2024</b>				
46		Tragacanth , sodium alginate	1					
47		agar, guar gum, gelatin	1					
48		Miscellaneous - squill , Galls , Ashwagandha Tulsi , guggul	1					
49		Plant fibres used as surgical dressing: cotton, silkRegenerated fibres: silk, rayon, nylon, terylene	1	<b>21/01/2025 to 27/01/2025</b>				
		<b>Tutorial no. 14</b>	<b>1</b>	<b>22/01/2025</b>				

<b>Unit-6</b>	50	<b>Plant fibres used as surgical dressing:</b> cotton, silk	1		<b>Hand written Notes</b>			
		<b>Plant fibres used as surgical dressing:</b> wool and regenerated fibres	1					
	52	Sutures- Surgical Catgut, and Ligatures	1					
<b>Unit-7</b>	53	<b>Basic principles involved in the traditional systems of medicine like:</b> Introduction, objectives, basic principles of Ayurvedic system,	1		<b>Hand written Notes</b>		After completion of the topic the student will be able to the concepts of Basic principles involved in the traditional systems of medicine Ayurveda, Siddha, Homeopathy, Unani.	
	54	Objectives, Basic principles of Siddha system	1					
	55	Objective and various type of treatment of Unani system	1					
		<b>Tutorial no. 15</b>	<b>1</b>	<b>29/01/2025</b>				
	56	Objective of Homeopathy system of medicine and basic principle	1					
	57	Method of preparation of	1					

		Ayurvedic formulation like: Arista, Asava						
	58	Gutika, Taila						
		<b>Tutorial no. 16</b>	<b>1</b>	<b>05/02/2025</b>				
	59	Churna, Lehya, bhasma	1					
	60	Method of preparation of Ayurvedic formulation of Bhasma	1					
<b>Unit-8</b>	61	<b>Role of medicinal and aromatic plants in national economy and their export potential</b>  Introduction, Indian medicinal and aromatic plant trade in world scenario	1	<b>11/02/2025 to 20/02/2025</b>	<b>Hand written Notes</b>		After completion of the topic the student will be able to the concepts of Role of medicinal and aromatic plants in national economy and their export potential	
	62	International trade, export potential of india in medicinal and aromatic products	1					
	63	<b>Herbs as health food:</b> Introduction of nutraceuticals, antioxidant and their sources	1					
	64	Pro-biotics, Pre-biotics, Dietary fibres	1					



	65	Omega-3-fatty acids, Spirulina	1					
		<b>Tutorial no. 17</b>	<b>1</b>	<b>19/02/2025</b>				
	66	Carotenoids, Soya and Garlic	1					
<b>Unit-10</b>	67	Introduction to herbal formulation	1	<b>22/02/2025 to 27/02/2025</b>	<b>Hand written Notes</b>	Assignment on Herb-Drug interaction documented in the literature and their clinical significances.	After completion of the topic the student will be able to the concepts of Introduction and The classification of herbal cosmetics Sources, chemical constituents, commercial preparation, therapeutic and cosmetic uses	
	68	Importance of herbal formulation	1					
	69	uses of herbal formulation	1					
	70	various types of herbal formulation	1					
<b>Unit-11</b>	71	Source , Chemical constituent , commercial preparations , therapeutics use and cosmetic use of - Aloe vera gel	1	<b>15/03/2025 to 04/03/2025</b>	<b>Hand written Notes</b>			
	72	Lavender oil , olive oil	1					
	73	rosemary oil , sandal wood oil	1					
		<b>Tutorial no. 18</b>	<b>1</b>	<b>19/03/2025</b>				
<b>Unit-12</b>	74	Introduction of Phytochemistry	1				After completion of the topic the student will be able	
		<b>Tutorial no. 19</b>	<b>1</b>	<b>12/03/2025</b>				

	75	Phytochemical investigation of drugs	1		<b>Hand written Notes</b>		to the concepts of Phytochemical investigation of drugs	
		<b>Tutorial no. 20</b>	<b>1</b>	<b>19/03/2025</b>			Introduction, Herbal extraction, various extraction methods: maceration, decoction, digestion	

1. Total No of Assignments given: 03
2. Model question paper given: Yes/No
3. No. of extra lectures delivered:
4. Feedback from student taken: Yes/No

Signature of subject Teacher

HOD

Director cum Principal

