



Paramedical program	
Specialization	Pharmacy
Course number	020805241
Course title	Pharmacognosy
Credit hours	2
Theoretical hours	2
Practical hours	0



Brief Course Description:

Definition, history, and scope of medicinal plants, studying plants of medicinal importance , medicinal plants name, family, used parts ,systems of medicinal plants classification , active ingredients and clinical uses.

Course Objectives:

Upon the completion of the course, the student will be able to:

1. Know medicinal plants and their used parts
2. to identify active ingredients in medical plants
3. Know medicinal plants therapeutic uses
4. to Know the classification of active ingredients according to their chemical structure
5. to get acquainted with Resins and balsams.

Detailed Course Description:

Unit number	Unit name	Unit content	Time needed
1.	Introduction	<ul style="list-style-type: none"> ▪ Definitions: crude drug, advanced crude drug, allopathic medicine, alternative medicine ▪ Historical briefing on medicinal plants, and its development till now ▪ Classification, indigenous and cultivated plants, factors involved in production of plants, official drugs. 	
2.	Leaves	<ul style="list-style-type: none"> ▪ Photosynthesis ▪ Physical Identification of leaves ▪ examples (Digitalis, Tea, Coca, Jaborandi, Buchu, Senna, Eucalyptus, Tobacco, Rosemary, Henna, Thyme, Khat, Peppermint, Sage, Belladonna, and Bearberry leaves). 	
3.	Flowers	<ul style="list-style-type: none"> ▪ Physical Identification of Flower ▪ Examples(Chamomiles, Clove, Lavender, and Saffron) 	
4.	Fruits	<ul style="list-style-type: none"> ▪ Physical Identification of fruits ▪ Examples (Anise, Fennel, Caraway, Cumin, Coriander, Vanilla, Cardamom, Capsicum, Lemon, and papaver fruits). 	
5.	Seeds	<ul style="list-style-type: none"> ▪ Physical Identification of seeds ▪ Examples (Sweet almond, Bitter almond, Soya, Black mustard, White mustard, Calabar beans, Nux vomica, Castor, Cotton, Sesame, Nutmeg, Fenugreek, Cola, Coffee, Linen, and Coco seeds). 	
6.	Barks and Woods	<ul style="list-style-type: none"> ▪ Physical Identification, Difference between them. ▪ Examples (Cinnamon, Cascara, Wild cherry, Pomegranate, Cinchona, Hamamelis, Sandal, Guaiacum, Quillaia, and Quassia woods). 	



7.	Subterranean organs	<ul style="list-style-type: none"> ▪ Roots, Rhizomes and bulbs, Physical Identification, Difference between them ▪ Examples (Rhaburb, Licorice, Ginger, Ipeca quanna, Rawolfia, Squill, and Garlic) 	
8.	Herbs	<ul style="list-style-type: none"> ▪ Peppermint, Belladonna, Indian hemp, and Indian tobacco. 	
9.	Unorganized parts	<ul style="list-style-type: none"> ▪ Dried juice (Aloe) ▪ Dried extract (Opium, Agar) ▪ Gums (Acacia , Tragaconth.) 	
10.	Plant Powders	<ul style="list-style-type: none"> ▪ (Locopodium) Kamala, lopulin, and Gowa powders. 	

Evaluation Strategies:

	Exams	Percentage	Date
	Mid Exam	40%	--/--/----
	Final Exam	50%	--/--/----
	Homework and Projects Discussions and lecture Presentations	10%	--/--/----

Teaching language:

- English

Teaching Methodology:

Lectures ,

Text Books & References:



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- 1- . Pharmacognosy Trease and Evans. 16th Edition, 2009, Published by ELBS, London ISBN 978-0702029332 2.
 - 2- Drugs of Natural Origin, 6th edition 2010 Gunnar Samuelsson.
 - 3- Medicinal natural products, a biosynthetic approach, 3rd edition, 2009 Paul Dewick, John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, United Kingdom , ISBN 0 471 49640 3.
 - 4- Pharmacognosy , phytochemistry, Medicinal Plants. 2nd edition Jean Bruneton: Springer Verlag, 2008, ISBN: 1898298130, 2743000287