

DAFFODIL INTERNATIONAL UNIVERSITY
DEPARTMENT OF PHARMACY

Lesson Plan

Course: BPH-122: Pharmacognosy-II

Lesson No.	Chapter Name	Lecture Topics	Credit Hours
Lesson-1	Introduction	Syllabus overview, Assessment process, Lecture schedule	1 hr 20 mins
Lesson-2	Glycosides and glycoside-containing drugs	Introduction, classifications & biosynthesis of glycosides.	1 hr 20 mins
Lesson-3		The details of the following classes of glycosides and glycoside-containing drugs	1 hr 20 mins
Lesson-4		Cardiac: Digitalis, Strophanthus, Squill, Nerium	1 hr 20 mins
Lesson-5		Anthraquinones: Cascara sagrada, Aloe, Senna, Rhubarb. Saponins: Sarsaparilla, Glycyrrhiza, Dioscorea. Cyanogenic: Wild Cherry.	1 hr 20 mins
Lesson-6		Isothiocyanate: Mustard (Black mustard and White mustard).	1 hr 20 mins
Lesson-7		Other glycosides like alcohol, phenol, aldehyde, flavonoid, lactone, etc. and neutral principles: Gentian, Quassia, Saffron.	1 hr 20 mins
Quiz -1, Marks-10 and Problem Solving			
Presentation (5) and Assignment (5)			
Lesson-8	Alkaloids	Introduction to Alkaloids, Classifications, Characteristics	1 hr 20 mins
Lesson-9		Tropane: Belladonna, Stramonium, Hyoscyamus, etc.	1 hr 20 mins
Lesson-10		Quinoline: Cinchona, Cusparia.	1 hr 20 mins
Lesson-11		Isoquinoline: Ipecac, Opium, Sanguinaria, Curare.	1 hr 20 mins
Lesson-12		Indole: Rauwolfia, Nux vomica, Ergot, Catharanthus.	1 hr 20 mins
Lesson-13		Imidazole: Pilocarpine. Steroidal: Veretrum viride, Aconite	1 hr 20 mins

Lesson-14		Lupinea: Lupinus spp. Purine base: Coffee, Tea.	1 hr 20 mins
Lesson-15		Biosynthesis of tropane, quinoline, isoquinoline and indole alkaloids	1 hr 20 mins
Lesson-16		Problem solving class and Quiz 2	1 hr 20 mins
Quiz 2, Marks-10			
Midterm Examination (25 marks)			
Lesson-18	Volatile oils and related terpenoids	Methods of obtaining volatile oils, chemistry, their medicinal and commercial uses	1 hr 20 mins
Lesson-19		Biosynthesis of some important volatile constituents used as drugs.	1 hr 20 mins
Lesson-20		Terpenes or sesquiterpenes: Pinus, Juniper, Cade. Alcohols: Coriander, Sandalwood	1 hr 20 mins
Lesson-21		Ester: Peppermint, Lavender, Rosemary.. Aldehydes: Cinnamon, Eucalyptus, Lemon, Lemon grass. Ketons: Spearmint, Caraway, Dill, Camphor.	1 hr 20 mins
Lesson-22		Phenols: Clove, Cinnamon, Ajowan. Ethers: Fennel, Nutmeg, Eucalyptus, Anise, Cajuput. Peroxides: Chenopodium. Others: Mustard, Wintergreen, Bitter almond.	1 hr 20 mins
Quiz -3, Marks-10			
Lesson-23	Phenolic compounds and tannins	Chemical nature and tests for tannins	1 hr 20 mins
Lesson-24		Some tannin-containing drugs such as Nutgall and Catechu.	1 hr 20 mins
Lesson-25	Resin and resin combinations	General consideration, classification and study of resin, oleo resin, oleo-gum resin, tolu balsam and benzoin.	1 hr 20 mins
Lesson-26	Herb as health foods	Alfa alfa, Apricot, Pits, Arnica, Garlic, Onion, Ginseng, Spirulina,	1 hr 20 mins
Lesson-27		Fenugreek, Sassafras, Honey, Nigella etc.	1 hr 20 mins
Quiz-4, Marks-10 (If Necessary)			
Lesson-28		Datura, Poison hemlock, Water hemlock, Foxglove (digitalis), Ipornoca,	1 hr 20 mins

	Poisonous plants and natural pesticides	Tobacco, Poppy, Pyrethrum flower, Derris & Lanchocarpus, Red squill, Strychnine, etc	1 hr 20 mins
Lesson-29		Review	1 hr 20 mins
Lesson-30		Overall Review	1 hr 20 mins
Semester Final Examination (50 marks)			