IRAN UNIVERSITY OF MEDICAL SCIENCES

School of pharmacy

Department Medicinal Chemistry

Course title: Medicinal Plants

Credit (Theory or Practical): 1 (Practical, M-Pharm)

Prerequisite: Medicinal Plants (Theory)

Course Lecturers: Dr. Sabernavaei, Dr. Naseri, Dr. Sharafi-Badr, Dr. Pirali.

Responsible Lecturer: Dr. Sabernavaei

Course Description: Qualitative identification of medicinal plant powder, collection and preparation of herbarium specimens and identification of medicinal plants at the family and genus level

- Course objectives: Familiarizing students with plant systematics (kingdom, order, family, genus and species) and identification principles for nomenclature of plants - Familiarizing students with important morphological characteristics of plants families - Introduction of medicinal plants of Iran and the world in each described family - Classification of medicinal plants based on treatment of different diseases and their pharmacological effects

Student Learning Objectives: Giving students perspective about the status of medicinal plants - Know the role of medicinal plants in medical and pharmaceutical sciences 2 - Know the correct scientific and common name of medicinal plants - Be able to guess the families of important medicinal plants - Know the usage of medicinal plants

Students are expected to:

1. Identify Medicinal Plants
• Recognize medicinal plants at the family and genus level using morphological characteristics.
• Utilize botanical keys and references for proper identification.
2. Perform Qualitative Analysis of Medicinal Plant Powders
• Conduct macroscopic and microscopic examinations of powdered medicinal plants.
3. Collect and Prepare Herbarium Specimens
• Properly collect, press, and dry medicinal plants for herbarium preservation.
• Document essential details including scientific name, collection location, and plant characteristics.

Course title:

	subject	Lecturer	Presentation method	Date
1	Class grouping, Identification of pharmaceutical market samples Herbarium sample preparation method, Identification of plant & herbarium samples	Dr. Sabernavaei	Discussion Based Learning	Apr 6th
2	The principles of preparing plant powders for micrographs, Microscopic Identification of starch powders with different plant sources.	Dr. Sabernavaei	Discussion Based Learning	Apr 13th
3	Identification of samples of plants & herbarium samples Microscopic Identification of zingiber	Dr. Sharafi	Discussion Based Learning	Apr 20th
4	Identification of plant samples & herbarium samples Microscopic Identification of Glycyrrhiza glabra	Dr. Sharafi	Discussion Based Learning	Apr 27th
5	Identification of eight samples of plants & two herbarium samples Microscopic Identification of Atropa	Dr. Naseri	Discussion Based Learning	May 4th
6	Identification of plant samples & herbarium samples Microscopic Identification of Datura	Dr. Naseri	Discussion Based Learning	May 11th
7	Identification of plant samples & herbarium samples Microscopic Identification of Senna	Dr. Pirali	Discussion Based Learning	May 18th
8	Identification of plant samples & herbarium samples Microscopic Identification of Calendula	Dr. Pirali	Discussion Based Learning	May 25th
9	Visiting the botanical garden	Dr. Sabernavaei, Dr. Naseri, Dr. Sharafi, Dr. Pirali.		
10	Exam			

References:

1- Jackson, B.P. and Snowdon, D.W., 1990. Atlas of microscopy of medicinal plants, culinary herbs and spices. Belhaven Press.

Notes:

- All classes will be held in Besarati (Eastern 7) street, North Shahin Boulevard

The absence hours of a student should not exceed 4/17 in theoretical, 2/17 in practical and laboratorial. Otherwise, the score for that course or section will be considered as zero.

Note 1: allowed absences are accepted provided that students bring in documents for that and the related professor approves it. Acting against absences (either excused or not) will be the decision of the professor and agreement of the college.