

Course Description Template for Pharmacognosy Third Year First Semester (Practical)

**Review the performance of the higher education institution
((review of the academic program))**

Course Description

This course description provides a summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, proving whether he has made the most of the available learning opportunities and must be linked to the program .description

1. Educational Institution	Ministry of Higher Education and Scientific Research / Al-Zahrawi University
2. University Department / Center	College of Pharmacy
3. Course Name / Code	Pharmacognosy II partical PPCG33
4. Programs in which it is included	Bachelor of Pharmaceutical Sciences
5. Available Forms of Attendance	Daily Attendance
6. Semester / Year	First Semester / Third year
7. Total Number of Study Hours	2 hours weekly/ 30 hours total
8. Date of preparing this description	2025-2026
9.Course Objectives: This practical course provides students with hands-on experience in the extraction and identification of active constituents from medicinal plants. Students become familiar with the preparation of plant materials, selection and application of appropriate extraction methods, and basic procedures used for the separation of plant constituents. The course emphasizes the extraction and identification of different classes of glycosides from their medicinal plant sources using suitable chemical tests and practical techniques. Through laboratory work, students develop basic skills in handling plant materials, preparing extracts, performing identification tests, observing results, and relating laboratory findings to the active constituents present in medicinal plants.	

10. Learning Outcomes, Teaching and Learning Methods, and Evaluation

A. Knowledge and Understanding

1. General study of Glycosides and their classification
2. Methods of extraction of Glycosides
3. Glycoside's separation
4. Methods of identification of laboratory-extracted substances

B. Subject-Specific Skills

1. Acquire skills in extraction methods.
2. Acquire skill in isolating active compounds.
3. Acquire skill in identifying separate compounds.

Teaching and Learning Methods

1. Theoretical lectures
2. Seminars and reports
3. Laboratory Experiments.
4. Field visits to herbal centers in addition to the botanical garden

C. Evaluation Methods

- ☐ Semi-semester exams and final exams.
- ☐ Oral exams
- ☐ Classroom activities and assignments
- ☐ Assessment of student work during the experiment

D. Thinking Skills

- 1-The use of modern methods in the preparation of lectures and presentations in the form of PowerPoint
- 2-The use of group discussion to understand the article
- 3-Giving homework that stimulates and activates thinking and linking information

E. General and Transferable Skills

- The student should be able to employ the knowledge he has received.
- ☐ Giving confidence to the student through the discussion of seminars.
 - ☐ The student should be able to embody what he has acquired in professional development.

11. Course Description					
Weeks	Hours	Required Learning Outcomes	Unit Name / Course or Topic	Learning Methods	Evaluation Method
1	2	Knowledge and lab skills	Introduction of Glycosides	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
2	2	Knowledge and lab skills	Extraction of Cardioactive Glycosides	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
3	2	Knowledge and lab skills	Identification of Cardioactive Glycosides	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
4	2	Knowledge and lab skills	Extraction of Anthraquinone Glycosides	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
5	2	Knowledge and lab skills	Identification of Anthraquinone Glycosides	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
6	2	Knowledge and lab skills	Extraction of saponin Glycosides	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
7	2	Knowledge and lab skills	Identification of saponin Glycosides	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams

8	2	Knowledge and lab skills	Extraction of Flavonoids Glycosides	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
9	2	Knowledge and lab skills	Identification of Flavonoids Glycosides	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
10	2	Knowledge and lab skills	Extraction of Tannins	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
11	2	Knowledge and lab skills	Identification of Tannins	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
12	2	Knowledge and lab skills	Extraction of volatile oil	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
13	2	Knowledge and lab skills	Identification of volatile oil	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
14	2	Knowledge and lab skills	Identification of Known Compounds by chemical tests	Lab Experiment	Report
15	2	Knowledge and lab skills	Identification of Known compounds by TLC	Lab Experiment	Report
Total	45				

12. Infrastructure	
Required Readings:	References: W.C Evans, “Trease and Evans: Pharmacognosy” 16 Edition, 2009 ☐ James E. Robbers, Marilyn K. Speedie, Varro E. Tyler “Pharmacognosy and Pharmacobiotechnology” 1996. ☐ Pharmacognosy Lab Manual
Special Requirements (Workshops, Journals, Software, Websites):	Electronic Websites:
Social Services (Guest Lectures, Professional Training, Field Studies, Others)	Organizing workshops and courses for graduates:

13. Admission:	
Prerequisites	Admission according to the central plan
Minimum Number of Students	/
Maximum Number of Students	Admission exceeds the capacity plan.

Name of the Instructor:

Msc. Mohammed Jasim

Msc. Ahmed Abdul Wahab Ali