

Course Description Template for Pharmacognosy Third Year Second 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	pharmacy College
3. Course Name / Code	Pharmacognosy III partical PPCG33
4. Programs in which it is included	Bachelor of Pharmaceutical Sciences
5. Available Forms of Attendance	Daily Attendance
6. Semester / Year	Second 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: Alkaloid identification, extraction and medicinal importance	

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

A. Knowledge and Understanding

1. General study of alkaloids and their classification
2. Methods of extraction of alkaloids
3. Alkaloid 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

1. Semi-semester exams and final exams.
2. Oral exams
3. Classroom activities and assignments
4. 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

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

11. Course Structure					
Weeks	Hours	Required Learning Outcomes	Unit Name / Course or Topic	Learning Methods	Evaluation Method
1	2	Knowledge and lab skills	General Extraction Methods for alkaloids	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
2	2	Knowledge and lab skills	General Identification Methods for Alkaloids	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
3	2	Knowledge and lab skills	Introduction to alkaloids	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
4	2	Knowledge and lab skills	Extraction of Piperine Alkaloid from Black Pepper	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
5	2	Knowledge and lab skills	Identification of Piperine Alkaloid from Black Pepper	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams

6	2	Knowledge and lab skills	Extraction of Tropane Alkaloids from Stramonium	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
7	2	Knowledge and lab skills	Identification of Tropane Alkaloids from Stramonium	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
8	2	Knowledge and lab skills	Extraction of Indole Alkaloids from Peganum harmala	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
9	2	Knowledge and lab skills	Identification of Indole Alkaloids from Peganum harmala	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
10	2	Knowledge and lab skills	Purine Alkaloids Isolation of Caffeine from Tea Leaves	Lab Experiment	Evaluation of laboratory skills and lab reports oral and written exams
11	2	Knowledge and lab skills	Quantitative and Qualitative Analysis of caffeine Crystals	Lab Experiment	Evaluation of laboratory skills and lab reports

12	2	Knowledge and lab skills	Extraction of alkaloidal amines	Lab Experiment	Evaluation of laboratory skills and lab reports
13	2	Knowledge and lab skills	Identification of alkaloidal amines	Lab Experiment	Evaluation of laboratory skills and lab reports
14	2	Knowledge and lab skills	Identification of unknown compounds by chemical tests	Lab Experiment	Evaluation of laboratory skills and lab reports
15	2	Knowledge and lab skills	Identification of unknown compounds by TLC	Lab Experiment	Evaluation of laboratory skills and lab reports
Total	30				

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

Name of the Instructor:

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