



The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

1	Course title	Taxonomy of flowering plants (plant systematics)
2	Course number	34452
3	Credit hours (theory, practical)	3
	Contact hours (theory, practical)	2, 3
4	Prerequisites/co-requisites	General Botany (B. 251)
5	Program title	Biological Sciences
6	Program code	
7	Awarding institution	University of Jordan
8	Faculty	Science
9	Department	Biology
10	Level of course	B.Sc. degree
11	Year of study and semester (s)	Second Semester 2018/2019
12	Final Qualification	BSc. in Biological Sciences
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	2017/2018

16. Course Coordinator:

Sawsan Oran , PhD
 Office: 106 Biology building
 Phone number: 22226
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17. Other instructors:

None

18. Course Description:

The course is basic course designed for the undergraduate biological science and other branches of agriculture sciences, especially horticulture, weed control and rangeland management students. **The students will be** trained how to describe plants by teaching them the terminology of plants, as well as identification, classification, use of construction of keys. It also gives a back ground about collection and conservation of plant specimens in addition of herbarium management, importance and rules in documenting and preserving of plant specimens for future use. The course is also giving an idea about the methods of nomenclature and about the biological evidences of other biological sciences to taxonomy. Finally the students are to be exposed to some evolutionary aspect and origin of plant groups.

19. Course aims and outcomes:

The course aims to train students on basic taxonomy, by giving the students basic knowledge about the aims of this science, and the need of this science to other branches of biological, pharmaceutical and medical sciences. The practical part aims at teaching students to identify major local flowering families by using given keys for identification. Moreover the students will learn how identify, describe and construction of keys. Finally learn the proper method of collecting preserving, filling and handling of herbarium specimens.

A- Aims:

This course will enable students to get knowledge about taxonomy of flowering plants, classification rules of nomenclature, construction of keys for the families. Description of selected local families of Flora of Jordan and monument of Herbaria.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to get knowledge rules and methods of classification and identification of flowering plants, students will get to know about names and description of selected plant species with emphasis on the local flora. Students will learn about using the herbarium and the management of the deposited and collected other plant specimens.

20. Topic Outline and Schedule:

Topics

1. Introduction to Systematic Botany
2. Definitions, Objectives and Phases
3. Terminology of Flowering Plants
4. Vegetative Morphology
5. Reproductive Morphology
6. Descriptive methods
7. Methods of identifying vascular plants
8. Key uses and constructions
9. Key uses and constructions
10. Specimen preparation and herbarium management
11. Specimen preparation and herbarium management
- 12. FIRST HOUR EXAM**
13. Historical background of classification
14. Historical background of classification
15. Plant Nomenclature

16. Plant Nomenclature
17. Principles of plant taxonomy
18. Principles of plant taxonomy
19. Sources of taxonomic evidences
20. Morphology and anatomy
21. Embryology, Cytology and Electron Microscopy
22. Palynology, Paleobotany and Chemotaxonomy
23. Ecology, Physiology and Biogeography

24. SECOND HOUR EXAM

25. The origin and classification of Angiosperm
26. The origin and classification of Angiosperm
27. The origin and classification of Angiosperm
28. Evolution and Biosystematics
29. Evolution and Biosystematics
30. Evolution and Biosystematics

MARKS

First Exam	30%
Midterm Exam (Theory + Practical)	30%
Final Exam (Theory + Practical)	40%
TOTAL	100%

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

Interactive lecture using the white board mainly and in some cases the data show .

Office hour discussions

Lab reports

Presentations

Voluntary work at the Herbarium and Botany Labs

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Short answer questions during the lectures and interaction with the students through involving them in questions and answers related to the different topics of the course of Plant biology.

Exams

Presentations

23. Course Policies:

A- Attendance policies: Regular class attendance is expected, attendance by seating number.
 B- Absences from exams and handing in assignments on time: Reporting a valid reason of absence is accepted.

24. Required equipment:

Available university services that support achievement in the course:

Data Show, internet access

Visits at the University to show the available plant groups, also visits to the **Herbarium** and the **green** house to look at the native plants and others

25. References:**Text Book :**

Lawrence, G. H.M. (1969). Taxonomy of Vascular Plants (Ed. Ten). The Macmillan Company: New York.

Porter, C. L. (1967). Taxonomy of Flowering Plants. W.H. Freeman and Company, San Francisco. Pp. 472.

Radford, A. E., Dickison, W. C., Massey, J. R. and Bell, R. C. (1974). Vascular Plant Systematic. Harper & Row, New York. Pp. 891.

Stace, C. A. (1980). Plant Taxonomy and Biosystematics. Edward Arnold, London. Pp.279.

Walters, D. R. and Keil, D. J. (1988). Vascular plant Taxonomy (ed. Three). Kendal / Hunt Publishing Company, Iowa, USA.

26. Additional information:

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Name of Course Coordinator: Prof. Dr. Sawsan Oran Signature: ----- Date: 14 May,2018

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:

Head of Department

Assistant Dean for Quality

Assurance

Course File