



**The University of Jordan**

**Accreditation & Quality Assurance Center**

# **COURSE Syllabus**

|    |  |                              |
|----|--|------------------------------|
| 1  | Course title   | Medicinal Plants             |
| 2  | Course number  | 0344954                      |
| 3  | Credit hours (theory, practical)                     | 3                            |
|    | Contact hours (theory, practical)                    | 3                            |
| 4  | Prerequisites/co-requisites                          | None                         |
| 5  | Program title  | Biological Sciences          |
| 6  | Program code   |                              |
| 7  | Awarding institution                                 | University of Jordan         |
| 8  | Faculty  | Science                      |
| 9  | Department   | Biology                      |
| 10 | Level of course                                      | Msc                          |
| 11 | Year of study and semester (s)                       | first Semester 2017/2018     |
| 12 | Final Qualification                                  | M.Sc. 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  
Email: Oransaw@ju.edu.jo

**17. Other instructors:**

None

**18. Course Description:**

The course is dealing with introducing the students to plants that are of medicinal with emphasis on the MPs in Jordan values, photochemistry of the related plants., the use of medicinal plants for human at national and international levels, the use of medicinal plants in folk traditional medicine and in the pharmaceutical industry, also the tools of conserving the MPs and conservation policies also providing study cases and on-going research of medicinal plants at local and global levels. Presentations are given by students on different topics of medicinal plants.

**19. Course aims and outcomes:**

**A- Aims:**

The student will be able to get knowledge about medicinal plants, their distribution in Jordan and abroad, the use of medicinal plants in folk medicine and in the pharmaceutical industry, the research that is dealing with medicinal plants at local and international levels and providing studies that are of medicinal values, delivering the concept of protecting and conserving medicinal plants using biotechnological and classical methods of conservation, encouraging the students to conduct research on medicinal plants that at of interesting values.

**B- Intended Learning Outcomes (ILOs):** Upon successful completion of this course students will be familiar with the a good number of medicinal plants locally and globally, they are getting to have knowledge about the conducted and the on-going research on medicinal plants, the will be aware of how medicinal plants are contributing in many industries like pharmaceutical industry, cosmetics and perfumery, and others, finally they will be able to understand the phytochemical constituents of the related medicinal plants.

**20. Topic Outline and Schedule:**

1. –Introduction to vascular medicinal plants global and local examples are given: **2 lectures**
- 2 - The use of medicinal plants for the leisure of human on local and international levels **2 lectures**
- 3 - The use of medicinal and its contribution in serving the human communities (Folk medicine and pharmaceutical industry)**  
**1 lecture**
4. The general status of medicinal plants in Jordan and the Arab world. **2 lectures.**
5. Biotechnology in the production and conservation of medicinal plants **2 lectures**
6. Enhancing the role of protected areas in conserving medicinal plants **2 lectures**
7. Botanic Gardens and their role in the conservation of medicinal plants lectures **2**
8. The role of Chinese botanical gardens in conservation of medicinal plants **1 lecture**
9. Policies to conserve MPs. **1 lecture**
- 10 The conservation of medicinal plants used in primary health care (global cases) **1 lecture**
11. Medicinal plants and Law **1 lecture**
12. The need for public awareness **1 lecture**
13. Germplasm, genetic erosion and conservation of medicinal plants, study cases locally and globally. **1 lecture**
14. Experiences from programs to conserve medicinal plants **2 lectures**
15. The Chinese approach to medicinal plants , their utilization and conservation **1 lecture**
16. Complexity and conservation of medicinal plants **1 lecture**
17. Utilization of **Indigenous medicinal plants and their conservation in some places in Asia (Bangladesh and others)** **1 lecture**
18. Development and a conservation policy on commercially exploited medicinal plants : A case study from south Africa proposal for international collaboration **1 lecture**
19. Studied cases on the effect of medicinal plants of the biological activities on plants and animals and microorganisms (publishes national and international) **3 lectures**
20. on-going research on medicinal plants regarding the effect of medicinal plants on living

organisms (native and international joint projects) **2 lectures**

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## 21. Teaching Methods and Assignments:

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

Interactive lecture using data show  
Office hour discussions  
Presentations

## 22. Evaluation Methods and Course Requirements:

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

Opportunities for discussions

1. Term paper Akerele, O., Heywood, V., Synge, H. (1988). The Conservation of Medicinal Plants. Cambridge University Press, New York.
2. Al-Wareh H., Al-Ghazal R., Mouchntat A. (1993). Medicinal and Aromatic Plants. Aleppo University Publications. Syria.
3. Boulos, L. (1983). Medicinal Plants of North Africa. Reference Publications, Michigan.
4. Harborne, J. (1973). Phytochemical Methods. Chapman and Hall, London.
5. Hill, A. (1952). Economic Botany. McGraw-Hill Book Company, New York.
6. Oran, S. A., Al-Eisawi, D. M. (1998). List of Medicinal Plants in Jordan. Dirasat (Medical and Biology Sciences) 25 (29), 84-112
7. Oran, S.A. (1994). Genetic Resources of Medicinal Plants in Jordan Jordan., Proceedings, Plant Genetic Resources of Jordan, Proceedings of a national seminar, 2-4 August 1994, Amman, Jordan (IPGRI),
8. Panos, M. and Heimlich J. The Complete of Family Homeopathic Medicine. Orient Paperback,

Bombay.

9. Podlech, D. (1996). Herbs and Healing Plants of Britain and Europe. Harper Collins Publishers. London.

Primack, R. (1993). Essentials of Conservation Biology. Sunderland, Massachusetts

Presentation

Exams

### 23. Course Policies:

A- Attendance policies: Regular class attendance is expected

B- Absences from exams and handing in assignments on time: Reporting a valid reason of absence is accepted.

E- Grading policy: Depends on average

#### Grading:

|                                     |             |
|-------------------------------------|-------------|
| <b>-Midterm Exam</b>                | <b>30%</b>  |
| <b>-Presentation and term paper</b> | <b>20%</b>  |
| <b>-Final Exam</b>                  | <b>50%</b>  |
| -----                               |             |
| <b>Total</b>                        | <b>100%</b> |

### 24. Required equipment:

Available university services that support achievement in the course:

Data Show, white board , internet access

### 25. References:

#### Textbook:

10. Akerele, O., Heywood, V., Synge, H. (1988). The Conservation of Medicinal Plants. Cambridge University Press, New York.
11. Al-Wareh H., Al-Ghazal R., Mouchntat A. (1993). Medicinal and Aromatic Plants. Aleppo University Publications. Syria.
12. Boulos, L. (1983). Medicinal Plants of North Africa. Reference Publications, Michigan.
13. Harborne, J. (1973). Phytochemical Methods. Chapman and Hall, London.

14. Hill, A. (1952). Economic Botany. McGraw-Hill Book Company, New York.
15. Oran, S. A., Al-Eisawi, D. M. (1998). List of Medicinal Plants in Jordan. Dirasat (Medical and Biology Sciences) 25 (29), 84-112
16. Oran, S.A. (1994). Genetic Resources of of Medicinal Plants in Jordan Jordan., Proceedings, Plant Genetic Resources of Jordan, Proccedings of a national seminar, 2-4 August 1994, Amman, Jordan ( IPGRI),
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18. Podlech, D. (1996). Herbs and Healing Plants of Britain and Europe. Harper Collins Publishers. London.
- Primack, R. (1993). Essentials of Conservation Biology. Sunderland, Massachusetts

## 26. Additional information:

Name of Course Coordinator: Prof. dr. Sawsan Oran Signature: ----- Date: 7 Jan  
2018

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

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Head of Department: ..... Signature: -----

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

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

Assurance

Copy to:  
Head of Department  
Assistant Dean for Quality

Course File

