

**Course Specifications**

<b>University</b>	Beni-Suef
<b>Faculty</b>	Pharmacy
<b>Dept.</b>	Pharmacognosy

**1-Course Info.****Programme(s) on which the course is given:** Bachelor in Pharmacy**Course Name and code No.:** Botany and Medicinal Plants /201**Academic year/ Level:** 2018-2019, level 1, semester 1**Credit hours:** Lecture (2) hour + Practical (1) hour**2-Overall Aim of the Course**

To provide students with the knowledge necessary to prepare a crude drug from the farm to the firm. The students should also acquire the knowledge and skills necessary to recognize and identify leaf-drugs in entire and powdered forms. Test different secondary metabolite and differentiate between plant classes.

**3-Intended Learning Outcomes of the course (ILOs)****a. Knowledge and understanding**

a.1- Define different botanical terms

a.2- Identify morphological and histological characters of drugs composed of leaves.

a.3- Identify different classes of secondary metabolite, their uses and chemical tests.

a.4- List different methods of collection, drying, packing and preservation of medicinal plants that ensure their maximum level of active constituents.

a.5 - Differentiate between plant classes.

**b. Professional and Practical Skills**

b.1- Use microscope effectively in examination of starches, dusting powders and powdered medicinal leaves.

b.2- Test for different secondary metabolites

b.3- Describe the morphology and histology of a given leaf drug either in entire or powdered form

b.4- Acquire computer skill through e-learning course.

**c. Intellectual Skills**

c.1- Choose a proper natural drug for treatment of a given case taking in consideration the patient

history.

c.2- Compare between different secondary metabolites

#### d. General and Transferable Skills

d.1. demonstrate written and oral communication and IT skills

d.2. work effectively in a team.

#### 4-Course Contents

Topics	No. of hours	
	Tutorial / Practical	Lecture
General Introduction, crude drug, Natural Products	-	2
Cultivation of medicinal plants, environmental conditions, soil contents, growth regulators	-	2
Collection and drying of medicinal plants	-	2
packing and preservation of drugs adulteration and their detection	-	2
Secondary plant metabolites	-	4
Explanation and handling of microscope	1	-
Examination of different starches: potato, wheat, maize, rice	1	-
Examination of different dusting powders: Kiesleguhr, talc, kaolin, bentonite, sulphur, chalk	1	-
Hairs, Ca oxalates Stomata, secretary structures	2	1
Introduction to drugs composed of leaves	1	1
Senna leaf, boldo, jaborandi, buchu	1	2
Transverse section of leaves	1	2
Solanaceous leaves: Belladonna, Stramonium, Hyoscyamus	1	2
Digitalis and Henna , ginkgo, guava, eucalyptus, olive leaf	1	2
Taxonomy	-	2
Revision and practical assessments	2	-
<b>Total</b>	<b>12</b>	<b>24</b>

#### 5- Teaching and learning Methods

- 5.1. Lectures
- 5.2. Practical sessions
- 5.3. Field visit
- 5.4. E- learning course

#### 7- Student Assessment Methods

**a-Methods**

- Written sheets to assess knowledge, understanding and higher intellectual skills of the student.
- Practical exam to assess professional skills acquired by the student.
- Oral exam to assess communication skills of the students
- **E-learning course and assignments**

**b- Assessment Schedule**

Type of Assessment	Weak
assignments	7-12
Practical exam	12
Final Written exam	14-16
Final Oral exam	14-16

**c- Weighting of Assessment Marks**

Type of Assessment	Marks	Weight (%)
Practical exam	50	33.33%
Final Written exam	80	53.3333%
Final Oral exam	20	13.33333%
<b>Total</b>	<b>150</b>	<b>100%</b>

**8-List of References****a. Notes**

- a. Course Notes "Botany and Medicinal Plants" for first year pharmacy students by first year staff members.

**b. Mandatory Books****b. Suggested Books**

Trease and Evans Pharmacognosy, W.C. Evans, 14<sup>th</sup> edition.

**d. Journals and websites**

Faculty channel on Youtube:

<http://www.youtube.com/channel/UCGosHkjqHWFRrbY99FYvS7g>.

Google classroom: <https://classroom.google.com/c/NzgzMDU4NDA5N1pa>

e-learning website: <http://cms2.nelc.edu.eg/login/index.php>

Course Coordinator: Ass. Prof. Abeer Moawad

Head of department: Prof Dr. Sameh Abo Zaid Date: 9-2018