



Course specification
2018- 2019
Faculty of Pharmacy
Mansoura University



المستوى الأول

توصيف مقرر Botany

University: Mansoura University (MU)
Faculty : Pharmacy
Department: Pharmacognosy
Course title: Medicinal Botany

Program on which the course is given	B. Pharm
Academic Level	First Level, First semester
Date of course specification approval	10/9/2018

1- Basic Information : Course data :

Course title:	Medicinal Botany	Code: PG 111	
Specialization:	pharmaceutical sciences		
Prerequisite: Registration			
Teaching Hours:	Lecture: 1	Practical: 1	
Number of units: (credit hours)	2		

2- Course Aims:

Upon completion of the course, the student should learn the basic knowledge in the field of botany, use of the microscope, describe the plant cell, cell content and plant tissues, study plant classification (taxonomy) and prepare the students for coming study of pharmacognosy.

3-Intended learning outcomes (ILOs):

a- Knowledge and understanding

a1	Identify the principles of basic knowledge of pharmacognosy.
a2	Recognize the microscopical properties of plant cell and different plant tissues
a3	Describe the specific characters of each plant organ (stem, leaves, root)
a4	Understand plant classification

b- Intellectual skills

b1	Determine good laboratory practice and good safety practice guidelines
b2	Investigate the different parts of medicinal plants by their botanical and taxonomical features.



**Course specification
2018- 2019
Faculty of Pharmacy
Mansoura University**



b3	Construct appropriate methods for identification and standardization of herbal medicine
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c- Professional and practical skills

c1	Apply appropriate methods for identification and characterization of plant cell content
c2	Perform good pharmacy practice to examine different plant tissues and organs

d- General and transferable skills

d1	conduct successfully in team working
d2	Practice independent learning needed for continuous professional advancement
d3	Learn ethical, legal and safety rules in pharmacy practice.

4- Contents:-

Week No	Topics	No.of hours	Lecture credit hours	Practical credit hours
1.	Introduction to anatomy-plant cell	1	1	
2.	Plant tissues, meristems, dermal tissue	1	1	
3.	Ground tissue , Conducting tissue, Secretory system	1	1	
4.	Anatomy of the stem	1	1	
5	Anatomy of the root Anatomy of the leaf	1	1	
6	The secondary plant body	1	1	
7	Week 7 Mid-term Exam			
8	Introduction to pharmacognosy	1	1	
9	Introduction to pharmacognosy	1	1	
10	General Taxonomy	1	1	
11	plant families	1	1	
12	plant families	1	1	
13	Week 13 Practical exam			
14-18	Final written & oral exam			
	Practical topics			
1	How to use the microscope, how to make slide, safety guidelines in labs,	2		1



**Course specification
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Mansoura University**



	Plant cell structure, examination of Onion cell			
2	Ergastic cell content starch, vol.& fixed oils, proteins Ca ox & Carbonate	2		1
3	Dermal tissue (stomata)	2		1
4	Dermal tissue appendages (Trichomes)	2		1
5	Ground tissue	2		1
6	Conducting tissue	2		1
7	Mid term			
8	Anatomy of stem	2		1
9	Anatomy of root	2		1
10	Anatomy of leaf	2		1
11	Revision	2		1
12	Sheet	2		1
13	Practical exam	2		1

5- Teaching and learning Methods:

5.1	Lectures using white board and data show.
5.2	Practical session using laboratory equipment (microscope and glass wares)
5.3	Research assignments
5.4	Case study
5.5	Discussion session

6- Student Assessment:

a- Assessment methods:

1-Written exam	To assess understanding, intellectual, professional
2-Practical exam	To assess professional and practical skills
3-Oral	To assess Knowledge, understanding, intellectual skills, general skills and confidence
4-Quizzes	To assess Knowledge, understanding and intellectual skills
5-Case study	To assess the skills of problem-solving and date presentation



Course specification
2018- 2019
Faculty of Pharmacy
Mansoura University



b- Assessment schedule

Assessment 1	Practical	13 th week
Assessment 2	Mid-term	7 th week
Assessment 3	Oral	15 th week
Assessment 4	Written	15 th week

c- Weighting of assessments

1	Mid-term examination	10 %
2	Final-term examination	50 %
3	Oral examination	15 %
4	Practical examination & Semester work	25 %
5	Other types of assessment	0
Total		100%

7 - List of References

N0.	Reference	type
1	A Textbook of Plant Anatomy Pratibha Saxena and Susheela M. Das, Wisdom Press, 2012, v, 338	Book
2	Anatomy of Flowering Plants An Introduction to Structure and Development 3rd Edition AUTHOR: Paula J. Rudall, Royal Botanic Gardens, Kew DATE PUBLISHED: March 2007	Book
3	Plant Anatomy by James D. Mauseth (Author) Publisher: The Blackburn Press (June 1, 2008)	Book
4	Plant Anatomy, Morphology and Physiology by Clive Koelling (Editor) Publisher: Syrawood Publishing House (May 30, 2016)	Book

8- Matrix of knowledge and skills of the course

No	Course contents	Study Week	ILOS			
			Knowledge & understanding	Intellectual skills	Professional and practical skills	General & transferable skills
1.	Introduction to anatomy-plant cell	1	a1, a2, a3	b1,b2	c1, c2	d1, d3
2.	Plant tissues, meristems, dermal tissue	1	a1, a2	b3	c2	d3



**Course specification
2018- 2019
Faculty of Pharmacy
Mansoura University**



3.	Ground tissue Conducting tissue, Secretory system	1	a1, a2	b3	c2	d2
4.	Anatomy of the stem	1	a1, a2	b3	c2	d1, d3
5.	Anatomy of the root Anatomy of the leaf	1	a1, a2	b3	c2	d2
6.	The secondary plant body	1	a1,a3	b2	c2	d2
7.	Introduction to pharmacognosy	1	a1,a3	b2	c2	d2
8	Introduction to pharmacognosy	1	a1,a3	b2	c2	d2
9	General Taxonomy	1	a1,a3	b1		d2, d3
10	plant families	1	a1,a4	b2		d1
11	plant families	1	a1,a4	b2		d1

Course Coordinator :	Associate Professor: Mahmoud Fahmi Elsebai
Head of department	Prof. Dr. Mona G. Zaghloul