COURSE SPECIFICATIONS

Faculty of Pharmacy

First level – Semester 2

Bachelor of Pharmacy
(Clinical Pharmacy)

2018-2019

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COURSE SPECIFICATIONS

Pharmaceutical Organic Chemistry II

First level –Semester 2 2018-2018

Course Specification of Pharmaceutical Organic Chemistry (2)

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University: Zagazig Faculty: Pharmacy

A- Course specifications:

Programme(s) on which the course is given: Bachelor of Pharmacy

(Clinical pharmacy)

Major or Minor element of programmes: Major

Department offering the program: ------

Department offering the course: Pharmaceutical Organic Chemistry

Academic year / Level: first level / Second Semester

Date of specification approval: 27/8/2018

B- Basic information:

Title: Pharmaceutical Organic Chemistry II Code: PC203

Credit Hours: ---

Lectures: 2 hrs/week

Practicals: 1 hrs/week

Tutorials: ---

Total: 3 hrs/week

c- Professional information:

1-Overall Aims of the Course:

On completion of the course, the student will be able to:

On completion of the course, the student will be able to explain the aromatic, anti- aromatic and not aromatic compounds, chemistry of aromatic compounds as benzene and electrophilic substitution ex. nitration, sulphonation, halogenations & Friedel-Craft alkylation and acylation. Also nomenclature, synthesis and chemical reaction of arenes, sulphonic acid, nitro compounds, phenol, ether, aryl halides, and aromatic amines and

diazonium salts .Identification of aromatic compounds using spectroscopic tools as UV,IR,¹HNMR,¹³CNMR &mass spectrometer

2-Intended Learning Outcomes:

Kn	owledge and Understanding
a1	Illustrate the chemical character of aromatic compounds
a2	Explain the mechanism of different chemical reactions.
a3	Define the systematic nomenclature of different aromatic organic compounds
a4	Identify physical and chemical character of different functional groups
a5	Illustrate the principle of spectroscopic techniques in
Dwo	identification /analysis of aromatic compounds of essional and Practical skills
Pro	
b1	Handle basic laboratory equipments and chemicals effectively and safely.
b2	Perform laboratory experiments concerning synthesis and identification of different chemical compounds
b3	Interpret laboratory results effectively
Into	ellectual skills
c1	Assess spectroscopic tools for qualitative analysis of pharmaceutical compounds
c2	Select appropriate methods of synthesis and identification of aryl halides, phenols, aromatic aldehydes, ketones, carboxylic acids and pharmaceutically related compounds
Gei	neral and Transferable skills
d1	Work effectively as a member of a team
d2	Write and present reports.
d3	Develop critical thinking, and problem-solving skills.

D- Course Content:

Week	Lecture contents (2 hrs/lec.)	Practical session (1hrs/lab)
No.		
1	Aromaticity & aromatic compounds.	Laboratory safety
2	Benzene & electrophilic substitution	Identification of benzene
3	Electrophilic substitution	Preparation of nitrobenzene
4	Aromatic aliphatic hydrocarbon(arenes)	Preparation of m-nitro benzoic acid
	, Aromatic nitro compounds	Identification of benzoic acid
5	Aryl halides & aromatic nucleophilic substitution	Identification of phenol
6	Aromatic hydroxyl compounds ,alcohols& phenols	Preparation of tribromo phenol
7	Periodical exam	Periodical exam
8	Aromatic sulphonic acid and derivatives	Identification of aniline
9	Aromatic amines & diazonium salts	Preparation of Schiff base
10	Polynuclear aromatic hydrocarbons	Identification of naphthalene
11	U V Spectroscopy	Preparation of nitro naphthalene
12	IR Spectroscopy	Revision
13	Mass spectrometry	Practical exam
14	¹ HNMR & ¹³ CNMR Spectroscopy	Practical exam
15	Final written exam & oral exam	

E- Teaching and Learning Methods:

- Lectures
- Practical session
- Case study (interpretation of IR, Mass, NMR charts)
- Self learning (group discussion, group assignment)

F- Student Assessment methods:

- Written exams **to assess:** a1, a2, a3, a4, a5, c1, c2, d3
- Practical exams to assess: b1, b2, b3, d1, d2
- Oral exam **to assess:** a1, a2, a3, a4, a5, c1, c2, d1, d3
- Activities to assess: d1, d2, d3

Assessment schedule

Assessment (1): Written exams	Week 15
Assessment (2): Practical exams	Week 13, 14
Assessment (3): Oral exams	Week 15
Assessment (4): Activity	participation each lab
Assessment (5): Periodical exams	Week 7

Weighting of Assessment

Assessment method	Marks	Percentage
Written exam	50	50%
Practical exam & activity	25	25%
Oral exam	15	15%
Periodical exam	10	10%
TOTAL	100	100%

G- Facilities required for teaching and learning:

- For lectures: Black (white) boards, data show.
- **For Labs:** Chemicals, glassware, instruments, Digital balances, water bathes.

H- List of References:

- **1- Course Notes:** Student book of pharmaceutical organic chemistry approved by pharmaceutical organic chemistry department **2018-2019**.
- **2- Essential Books:** Organic Chemistry; Solomons T.W.G. & Fryhle C.B.; John Wiley and Sons Inc., USA (2010).
- **3-**Organic Chemistry, Second Edition, Bhupinder Mehta and Manju Mehta (2015

Course Coordinator: Prof. dr/ Hanan Abdel-Razik Abdel-Fattah Head of Department: Prof. dr/ Hanan Abdel-Razik Abdel-Fattah

Date: توصيف المقرر من مجلس القسم بتاريخ 27/8/2018

	Matrix I of Pharmaceutical Organic Chemistry 2 course													
	Course Contents	Knowledge and Understanding					Professional and practical skills			Intellectual skills		General and Transferable skills		rable
	Lectures	a1	a2	a3	a4	a5	b1	b2	b3	c1	c2	d1	d2	d3
1	Aromaticity & aromatic compounds	X		X			X							
2	Benzene & Elecrophilic substitution	X	X	X	X		X							
3	Electrophilic substitution & Arenes	X	х	X	X		X	Х						
4	Aryl halide & neucleophilic substitution	X	X	X	X		X	x						
	Exercises							X	X			X	X	X
5	Nitro compounds	X	X	X	X			X						
6	Sulphonic acids & derivatives	X	X	X	X			X						
7	Aromatic hydroxy compounds,alcohols&phenols		x	x	x			х						
8	Aromatic aldehydes&ketones	X	X	X	X			X						
σ	Exersises							X	X			X	X	X
9	Aromatic carboxylic acids	X	X	X	X					X				

	&derivatives											
10	Aromatic amines& diazonium salts	X	X	X	X		X					
11	UV Spectroscopy					X						
12	IR spectroscopy					X		X				
13	Mass Spectroscopy					X		X				
14	H ¹ NMR Spectroscopy					X		X				
15	Final written exam					X		X				
16												
	Practical sessions											
1	Laboratory safety								X	X		
2	Identification of benzene								X	X		
3	Preparation of nitrobenzene								X	X		
4	Identification of benzoic acid								X	X		
5	Preparation of m- nitrobenzoic acid.								X	X		
6	Identification of phenol								X	X		
7	Preparation of tribromophenol.								X	X		
8	Preparation of picric acid								X	X		
9	Identification of aniline & benzaldehyde.								X	x		

10	Preparation of Schiff base .					x	X		
	Identification of								
11	acetophenone & preparation					X	X		
	of acetophenone hydrazone.								
12	Identification of aniline HCl						•		
12	& urea					Х	X		
13	Preparation of monophenyl								
13	urea.					X	X		
14	Final practical examination					X	X		

	Matrix II of Pharmaceutical Organic Chemistry 2 course National Teaching and learning													
	National Academic	Program	Course			Teachi	ng and le	_	Weighting of assessment					
	Reference Standards NARS	ILOs	ILOs	Course contents	Sources	Lecture	Practical session	Self learning	Written exam	Practical exam	Periodical exam			
2.1	Principles of basic, pharmaceutical, medical, social, behavioral, management, health and environmental sciences as well as pharmacy practice.	A1	a1 a2 a3	Aromaticity & aromatic Laboratory safety compounds Benzene & electrophilic substitution Electrophilic substitution & arenes Aryl halide & neucleophilic substitution Electrophilic substitution & Arenes Nitro compounds Sulphonic acids & derivatives Aromatic hydroxy compounds, alcohols & phenols	Student book Essential books	X			X		X			

					Aromatic aldehydes&ketones					
					UV Spectroscopy					
					IR Spectroscopy	Student				
				a5	Mass Spectroscopy	book Essential books	X		x	x
					Spectroscopy	DOOKS				
					H ¹ NMR					
					Electrophilic substitution & Arenes	Student book Essential books Internet	x	x	х	
		Principles of isolation, synthesis, purification,			Aryl halide & neucleophilic substitution	Student book Essential books	X		X	
2	2.4	identification, and standardization methods of	A8	a4	Nitro compounds	Student book Essential books	X		x	x
		pharmaceutical compounds.			Sulphonic acids & derivatives	Student book Essential books	X		x	х
					Aromatic hydroxy compounds, alcohols & phenols	Student book Essential	Х		Х	х

				Aromatic aldehydes&ketones Aromatic carboxylic acids &derivatives Aromatic amines& diazonium salts	books				
3.2	Handel and dispose chemicals and pharmaceutical preparation safely.	B2	b1	 ✓ Electrophilic substitution & Arenes ✓ Aryl halide & neucleophilic substitution 					
3.4	Extract, isolate ,synthesize, purify, identify ,and/or standardize active substances from different origins.	В6	b2	✓ Nitro compounds ✓ Sulphonic acids & derivatives ✓ Aromatic hydroxy compounds, alcohols& phenols Aromatic aldehydes&ketones Aromatic carboxylic acids &derivatives Aromatic amines& diazonium salts	Practical notes	X		X	

4.13	Analyze and interpret experimental results as well as published literature.	C15	b3						
				Identification of benzene	Student book , practical	X			
4.5	Select the appropriate methods of isolation ,synthesis .purification	C6	c1	Preparation of nitro benzene.	book.	X		x	
	,identification ,and standardization		c2	Identification of benzoic acid.		X		Х	
	of active substances from different origins.			Preparation of m-nitro benzoic acid.		х		x	

5.3	Work effectively in a team	D4	d1	Identification of phenol & preparation of 2,4,6-tribromophenol	Internet Practical& book			X	x	
5.9	Implement writing and presentation skills.	D11	d2	Preparation of picric acid. Identification of aniline & benzaldehyde. Preparation of Schiff base.	Internet Practical& book			х	x	
5.10	Demonstrate critical thinking, problem solving, and decision making abilities	D12	d3	Exersises Identification of acetophenone. Preparation of acetophenone hydrazone. Identification of aniline HCl & urea. Preparation of monophenyl urea. Exessises	Practical notes	x	X		x x	

	Final Practical Exam				

تم مناقشة و إعتماد توصيف المقرر من مجلس القسم 2018/8/28

COURSE SPECIFICATIONS

Pharmaceutical
Analytical Chemistry I
First level –Semester 2
2018-2019

Course Specification of Pharmaceutical Analytical Chemistry-1

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University: Zagazig Faculty: Pharmacy

A- Course specifications:

Program(s) on which the course is given: Bachelor of Pharmacy

(Clinical Pharmacy)

Major or Minor element of programs: Major

Department offering the program: ------

Department offering the course: Pharmaceutical Analytical Chemistry

Academic year / Level: First level / Semester 2

Date of specification approval: September 2018

B- Basic information:

Title: Pharmaceutical Analytical Chemistry-I Code: PC 205

Credit hours:

Lectures: 2 hrs/week

Practical: 1hrs/week

Tutorials: ---

Total: 3 hrs/week

C- Professional information:

1-Overall Aims of the Course

On completion of the course, students will be able to

- Illustrate fundamentals and mechanisms of neutralization, preciptimetric, gravimetric and complexometric reactions.
- Describe the major procedures for running a reaction and the ideal conditions for each one.

- Apply studied quantitative methods for determination of different pharmaceutical compounds
- Ensure that the student has the skills to select the suitable method of analysis for analyte substances in pure form or in mixtures using the studied reactions and interpret the results.

2-Intended Learning Outcomes of Pharmaceutical Analytical Chemistry-1 (ILOs):

A- 3	Knowledge and Understanding							
a1	Outline principles of neutralization, preciptimetric, gravimetric							
aı	and complexometric reactions.							
a2	Illustrate the use of the studied reactions in the pharmaceutical							
42	assay.							
B -]	B- Professional and Practical skills							
b1	Handle and dispose chemicals safely.							
	Perform neutralization, preciptimetric, gravimetric and							
b2	complexometric titration assay for determination of some							
	compounds.							
C - 3	Intellectual skills							
c1	Interpret results obtained from different methods applied for							
	determination of different pharmaceutical compounds							
c2	Select the most appropriate standardization method for different							
02	compounds.							
D -	General and Transferable skills							
d1	Work as member of team.							
d2	Develop problem solving skills.							
d1	determination of different pharmaceutical compounds Select the most appropriate standardization method for different compounds. General and Transferable skills Work as member of team.							

D- Contents:

***/1-	Lecture	Practical Session					
Week	(2 hrs/week)	(1 hr/week)					
1	Theoretical bases of acid base reactions and pH calculations	 Safety guidelines Introduction to how to use the tools of analytical work Preparation and standardization of different acids and bases 					
2	Acid base equilibrium and pH calculations	 Determination of NaOH and Na₂CO₃ Determination of hydrochloric and acetic acid mixture 					
3	Buffer solutions and neutralization indicators	Determination of boric acid, borax and their mixture					
4	Color determination of pH and neutralization titration curves	- Determination of sodium carbonate and sodium bicarbonate					
5	Application of neutralization reactions and non aqueous titrations	- Determination of Nickel					
6	Theoretical bases of gravimetric analysis	- Determination of Calcium					
7	Contamination of gravimetric precipitates and its reduction	- Periodical exam (no labs)					
8	Application of gravimetric analysis	- Determination of Zinc					
9	Theoretical bases of preciptimetric reactions	- Determination of chloride					
10	Detection of end points in argentometric titrations Application of preciptimetric reactions	- Determination of calcium and magnesium in samples.					
11	Theoretical bases of complex formation	- Determination of copper metal in					

	titration, types of ligand ,chelation and	samples
	factors affecting on the stability of	
	complex	
	Titration with aminopolycarboxylic acid,	- Determination of zinc metal in
12	stability constant of EDTA complex	samples.
12		- Determination of manganese metal in samples
13	Titration of metal ion with ligands, Metal	- Revision
13	indicators	
	Application of complexometric titration,	Practical exam
14	cyanometric titration and mercuremetric	
	titration	
15	Final Exam	

E- Teaching and Learning Methods:

- Lectures (data show, board)
- Practical sessions
- Problem solving

F- Student Assessment Methods:

1- Written exam to assess : a1,a2, c1,c2,d2

2- Practical exam to assess : b1, b2, c1,c2, d1,d2

3- Oral exam to assess : a1,a2, c1,c2

4- Periodical exam to assess : a1,a2,c2,d2

Assessment schedule:

Assessment (1): Final written exam	Week 15
Assessment (2): Practical exam	Week 14
Assessment (3): Oral exam	Week 15
Assessment (4): Periodical exam	Week 7

Weighting of Assessment:

Assessment method	Marks	Percentage
Written exam	50	50%
Practical exam	25	25%
Oral exam	15	15%
Periodical exam	10	10%
TOTAL	100	100%

G- Facilities Required for Teaching and Learning:

- Lectures (Computer, board)
- Practical sessions (Chemicals and Glassware)
- Open discussion

H- List of References:

1- Course Notes

Lecture notes and department notes

2- Essential Books (Text Books)

- 1. J. Mendham, et al., Vogel's Textbook of Quantitative Chemical Analysis (6th edition);, Addison Wesley Publishing Co., 2000
- 2. Daniel C. Harris, Quantitative Chemical Analysis (6th Edition);. (2002).

3- Recommended Books

- 1. F D. C. Harris, Quantitative Analytical Chemistry (9th edition), W. H. Freeman and Co. (2015)
- 2. D. Chowrasia, N. Sharma, Analytical Chemistry. A Qualitative & Quantitative Approach (General Techniques) Knoc education (2015).

4- Periodicals, Web Sites, etc

https://www.ekb.eg/

http://chemwiki.ucdavis.edu/

http://en.wikipedia.org/ www.Pubmed.Com and www.sciencedirect.com

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Course Coordinators: Prof. Dr. Magda El Henawee

Head of department: Prof. Dr. Magda El Henawee

تم مناقشة و إعتماد توصيف المقرر من مجلس القسم بتاريخ سبتمبر 2018

	Matrix I of Pharmaceutical Analytical	Chemi	stry-1	(PC	205)					
	Course Contents	ILOs of the course									
	Lectures			prac	tical	intellectu		Transferab le and			
				skills		al skills		ge	neral kills		
		a1	a2	b1	b2	c1	c2	d1	d2		
1	Theoretical bases of acid base reactions and pH calculations	X							X		
2	Acid base equilibrium and pH calculations	X							X		
3	Buffer solutions and neutralization indicators	X									
4	Color determination of pH and neutralization titration curves	X							X		
5	Application of neutralization reactions and non aqueous titrations	X	X			X	X		X		
6	Theoretical bases of gravimetric analysis	X									
7	Contamination of gravimetric precipitates and its reduction	X									
8	Application of gravimetric analysis		X			X	X		X		
9	Theoretical bases of preciptimetric reactions	X									
10	Detection of end points in argentometric titrations	X	X			X	X		X		

	Application of preciptimetric reactions								
11	Theoretical bases of complex formation titration, types of ligand ,chelation and factors affecting on the stability of complex	X							
12	Titration with aminopolycarboxylic acid, stability constant of EDTA complex	X							X
13	Titration of metal ion with ligands, Metal indicators	X							
14	Application of complexometric titration, cyanometric titration and mercuremetric titration		X			X	X		X
	Practical Sessions								
	Tructical Sessions								
	- Safety guidelines								
1				X	X			X	X
1	- Safety guidelines			X	X			X	X
1	 Safety guidelines Introduction to how to use the tools of analytical work 			X		v	v		
2	 Safety guidelines Introduction to how to use the tools of analytical work Preparation and standardization of different acids and bases 			X	X	X	X	X	x

4	- Determination of sodium carbonate and sodium bicarbonate		X	X	X	X	X
5	- Determination of Nickel		X	X	X	X	X
6	- Determination of Calcium		X	X	X	X	X
7	- Periodical exam (no labs).						
8	- Determination of Zinc		X	X	X	X	X
9	- Determination of chloride		X	X	X	X	X
10	- Determination of calcium and magnesium in samples.		X	X	X	X	X
11	- Determination of copper metal in samples		X	X	X	X	X
12	 Determination of zinc metal in samples. Determination of manganese metal in samples 		X	X	X	X	X
13	- Revision	X	X	X	X	X	X

Matrix II of Pharmaceutical Analytical Chemistry-1 (PC 205)

National Academic Reference Standards		Progra m	Course	Course	Sources]	aching learnii metho	ng	W	eightin	g of asse	essment
	(NARS)	ILOs	ILOs	contents	contents		practical session	self learning	written exam	practical exam	oral exam	Periodical exam
2.1	Principles of basic, pharmaceutical, medical, social, behavioral, management, health and environmental sciences as well as pharmacy practice.	A1	a1	 Theoretical bases of acid base reactions and pH calculations Acid base equilibrium and pH calculations Buffer solutions Neutralization 	Student book Essential books Recommended books	X			x		X	X

	indicators
	Color
	determination of
	pH and
	neutralization
	titration curves
	Non aqueous
	titrations
	Theoretical
	bases of gravimetric
	analysis
	Contamination of
	gravimetric
	precipitates and its
	reduction
	Theoretical
	bases of
	preciptimetric
	reactions
	Detection of end
	points in
	argentometric
	titrations

				 Theoretical bases of complex formation titration, types of ligand ,chelation and factors affecting on the stability of complex Titration with aminopolycarboxyli c acid, stability constant of EDTA complex Titration of metal ion with ligands, metal indicators 						
2.17	Methods of biostatistical analysis and pharmaceutical calculations	A27	a2	 Application of neutralization reactions and non aqueous titrations Application of gravimetric 	Student book Essential books Recommended books Internet	x		х	X	X

				analysis Application of preciptimetric reactions Application of complexometric titration, cyanometric titration and mercuremetric titration					
3.2	Handle and dispose chemicals and pharmaceutical preparations safely	B2	b1	 Safety guidelines Introduction to how to use the tools of analytical work 	Practical notes	X		X	
3.4	Extract, isolate, synthesize, purify, identify, and/or standardize active substances from different origins.	B5	b2	 Preparation and standardization of different acids and bases Determination of NaOH and Na₂CO₃ Determination Of 	Practical notes	x		X	

	hydrochloric and
	acetic acid mixture
	Det. Of boric acid,
	borax and their
	mixture
	Determination Of
	sodium carbonate
	and sodium
	bicarbonate
	Determination of
	nickel
	Determination of
	calcium
	Determination of
	Zinc
	Determination of
	chloride
	Determination of
	calcium and
	magnesium in
	samples
	Determination of
	copper metal in

				samples Determination of zinc metal in samples. Determination of manganese metal in samples							
4.3	Apply qualitative and quantitative analytical and biological methods for QC and assay of raw materials as well as pharmaceutical preparations	С3	• c1 • c2	 Application of neutralization reactions Application of gravimetric analysis Application of preciptimetric reactions 	Student book Practical notebook	x	×	x	x	x	
4.13	Analyze and interpret experimental results as well as published literature	C15		 Application of complexometric titration, cyanometric titration and mercuremetric titration Practical sessions 							

				in weeks (2-6, 8-14)							
4.5	Select the appropriate methods of isolation, synthesis, purification, identification, and standardization of active substances from different origins.	C6	c2	 Application of neutralization reactions Application of gravimetric analysis Application of preciptimetric reactions Metal indicators, application of complexometric titration, cyanometric titration and mercuremetric titration Practical sessions in weeks (2-6, 8-14) 	Student book Practical notebook	X	X	X	X	X	X
5.3	Work effectively in a team	D4	d1	• All practical sessions	Practical notebook		x		X		

5.10	Develop critical thinking, problem solving and decision making skills.	D12	d2	pH calculations Acid base equilibrium and pH calculations Color determination of pH and neutralization titration curves Application of neutralization reactions and non aqueous titrations	Student book Practical notebook	X	X		X	X		X	
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	• Application of				
	gravimetric				
	analysis				
	• Application of				
	preciptimetric				
	reactions				
	 Stability 				
	constant of				
	EDTA				
	complex				
	• Application of				
	complexometr				
	ic titration,				
	cyanometric				
	titration and				
	mercuremetric				
	titration				
	All practical				
	sessions				

Course Coordinator: Prof. Dr. Magda El Henawee

Head of Department: Prof. Dr. Magda El Henawee

تم مناقشة و اعتماد توصيف المقرر من مجلس القسم بتاريخ سبتمبر 2018

COURSE SPECIFICATIONS

Pharmacognosy I
First level –Semester 2
2018-2019

Course Specification of Pharmacognosy1

University: Zagazig Faculty: Pharmacy

A- Course specifications:

Program (s) on which the course is given: Bachelor of pharmacy (Clinical

Pharmacy)

Major or Minor element of programs: Major

Department offering the program: ------

Department offering the course: Pharmacognosy

Academic year Level: First level /second term

Date of specification approval: 9/2018

B- Basic information:

Title: Pharmacognosy I code: PG.202

Credit hours:

Lectures: 2 hrs/ week

Practical: 1 hrs/ week

Tutorials: ---

Total: 3 hrs/ week

C- Professional information:

1-Overall Aims of the Course:

On completion of the course, the student will be able to:

- Describe morphological, histological characters and uses of medicinal flowers, barks, wood and herbs as well as identification of different active constituents and adulteration.
- Examine and determine the active constituents of the studied drugs

2-Intended Learning Outcomes (ILOs):

A-]	Knowledge and Understanding
a1	Illustrate morphological, Histological characters and uses of medicinal flowers, barks, wood and herbs
a2	Identify adulteration of different medicinal flowers, barks, wood and herbs.
a3	Identify different active constituents of medicinal flowers, barks, wood and herbs.
B- 1	Professional and Practical skills
b1	Handel and dispose chemicals in a safe way
b2	Handle lab microscopes effectively
b3	Examine drugs of plant origin in entire and powdered form.
C-]	Intellectual skills
c1	Adapt GLP and safety guidelines in the lab.
c2	Differentiate between drugs in entire and powdered form
c3	Differentiate the active constituents of different drugs.
D - (General and Transferable skills
d1	Work as a member of a team
d2	Implement writing and presentation skills
d3	Develop critical thinking, decision making and time management skills

D- Contents:

Week No.	Lecture contents (2hrs/lecture)	Practical session (1hrs/lab)
1	 General introduction for what will be taught all over the term Introduction for the flowers and giving the students the possible references, web sites, text books. 	 Laboratory safety measures Dealing with microscope.
2	 Rest of introduction of flower. Description of clove flower Including macro- and micro-morphological study for entire drug and for powdered clove. 	 Description of clove flower Including macro- and micro- morphological study for entire drug. Histology of powdered clove.
3	Chamomile (German and Roman) and calendula flowers macro-and, micro-morphology of the entire and powdered drugs, chemical identification.	German chamomile flower macro-, and micro-morphology, powders and chemical identification.
4	Rest of flower drugs, uses, active constituents, pharmaceutical preparations.	 Santonica flowers macroand, micro-morphology, powder and chemical identification. Activity (Net research on the pharmaceutical products derived from the flowers).
5	General introduction of bark	Cinnamon bark macro-and micro-morphology, powder and chemical identification.
6	• Rest of the introduction and cinnamon bark: macro-and; micro-morphology-, powder and chemical identification.	• Cassia barks (Morphology, histology, powder and chemical test, when it is possible.
7	 Cinchona in details: macro-and; micro-morphology, powder and chemical identification. Periodic exam. 	 Cinchona barks (Morphology, histology for entire drug powder and chemical test when it is possible. Morphological demonstration for all barks.
8	Cascarilla, quillaia, and canella bark (Morphology, histology, powder and chemical test when it is possible.	Revision for powdered barks (Cinnamon, Cassia and cinchona).

9	Cascara and frangula in details: macro- morphology; micro-morphology powder and chemical identification.	 Quassia wood: Macro- and micro-morphology of entire wood. Galls: Macro-morphology and micro-morphology of entire drug.
10	• Rest of the taught barks.	Hyoscymus muticus herb: Macro- and micro-morphology of entire drug
11	 Introduction to wood Galls: Macro-morphology of entire wood; micro-morphology-, Powder; chemical identification. 	Mentha: Macro- and micro- morphology of Powder and chemical identification
12	Herbs introduction	• Practical exam 1
13	Official and nonofficial herbs	• Practical exam 2
14	• Revision.	
15	• Final written exam.	

E- Teaching and Learning Methods:

- Lectures and interactive lectures.
- Practical sessions
- Self learning (group discussion, group assignment)

F- Student Assessment methods:

- Periodic exam to assess: a1, a2, a3, c1,c2 and c3
- Written exams to assess: a1, a2, a3, c1, c2 and c3
- Practical exams to assess: b1, b2, b3 and d1
- Oral exam to assess: a1, a2, a3, c1, c2 and c3
- Activities (group discussion, group assignment, case study) to assess: d1,
 d2, d3

Assessment schedule

Assessment (1): activity	Week 4
Assessment (2): Periodic exam	Week 7
Assessment (3): Practical exam	Week 12, 13
Assessment (4):Final written exam	Week 15
Assessment (5): Oral exams	Week 15

Weighting of Assessment

Assessment method	Marks	Percentage
Periodic exam	10	10%
Practical exam & activity	25	25%
Final written exam	50	50%
Oral exam	15	15%
TOTAL	100	100%

G- Facilities required for teaching and learning:

- For lectures: Black (white) boards and data show.
- For Labs: Chemicals, glassware and microscopes.

H- List of References:

1- Course Notes: Student book of Pharmacognosy I approved by Pharmacognosy Department (2018).

2- Essential Books:

- Wallis, T. (1967). "Text Book of Pharmacognosy 5th Edition, London." <u>J and A. Churchhill Ltd</u>: 81-82.
- De Smet, P. A., K. Keller, R. Hänsel and R. F. Chandler (1992). <u>Adverse effects of herbal drugs</u>, Springer.
- Betty, P. and W. Derek (2000). "Atlas of microscopy of medicinal plants, culinary Herbs and species." <u>CBS publisher New Delhi</u>: 17-42.

Evans, W. (2005). Trease and Evans Pharmacognosy, ed: 15th, Elsevier, a reed Elsevier

India pvt ltd.

Jackson, M. and A. Lowey (2010). Handbook of extemporaneous preparation: a guide to

pharmaceutical compounding, Pharmaceutical Press London, UK.

- Upton, R., A. Graff, G. Jolliffe, R. Länger and E. Williamson (2016). American herbal

pharmacopoeia: botanical pharmacognosy-microscopic characterization of botanical

medicines, CRC Press.

- McCreath, S. B. and R. Delgoda (2017). Pharmacognosy: Fundamentals, applications and

strategies, Academic Press.

3- Recommended Books

Martindale (2007), "The extra pharmacopeia". 31st edn., by James, E.F Reynolds. And

Kathleen Parfitt, Royal Pharmaceutical Society, London.

4- Periodicals and websites:

Aquilina A. (2013), The extemporaneous compounding of paediatric medicines at Mater

Dei Hospital. Journal of the Malta College of Pharmacy Practice. Issue 19, 28 – 30.

http://canadianpharmacistsletter.therapeuticresearch.com/ce/ceCourse.asp

https://www.google.com/search?safe=active&sxsrf=ACYBGNT1wfCQl6DGxZ5ouZYl1

QZZfJSrYg:1568843605556&q=Pharmacognosy4all&tbm=isch&source=univ&sa=X&v

ed = 2ahUKEwiel8TurdvkAhVIrxoKHcTHDMAQ7Al6BAgBECQ&biw = 1008&bih = 584

#imgrc=7NmuWomEPl70WM:

Course Coordinators: Prof. Dr. Fawkeya Abbas

Head of Department:

Date: 9/2018

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	Matrix 1 of Pharmacognosy I ILOs of Pharmacognosy I														
						ILO	s of Pha	rmacog	nosy I						
	Course Contents		vledge a erstandir			professional and practical skills			intellectual skills			Transferable and general skills			
		a1	a2	a3	b1	b2	b3	c1	c2	c3	d1	d2	d3		
	Lectures														
1	 General introduction for what will be taught all over the term Introduction for the flowers and giving the students the possible references, web sites, text books. 	x	x	X				x	x	x					
2	 Rest of introduction of flower. Description of clove flower Including Macro- and micro- morphological study for entire drug and for powdered clove. 	х	х	х				х	x	x					
3	Chamomile (German and Roman) and calendula flowers macro-and, Micro-morphology of the entire and powdered drugs, chemical identification.	х	x	X				x	x	x					
4	• Rest of flower drugs-, uses-, active constituents, pharmaceutical preparations.		x	X				x	х	X					
5	General introduction of bark.	x	x	X				x	x	X					

6	• Rest of the introduction and cinnamon bark: macro-and; micro morphology -, powder and chemical identification.	х	х	x				x	x	X		
7	Cinchona in details: macro-and; micro-morphology - powder and chemical identification.	x	x	X				x	x	X		
8	Cascarilla, quillaia, and canella bark (Morphology, histology, powder and chemical test when it is possible.	х	x	X				х	х	x		
9	Cascara and frangula in details: macro-morphology; micro- morphology powder and chemical identification.	x	х	X				x	x	X		
10	• Rest of the taught barks.	x	x	x				х	х	X		
11	 Introduction to wood Galls: Macro-morphology of entire wood; micro-morphology-, Powder; chemical identification. 	х	x	X				х	х	x		
12	Herbs introduction Official and nonofficial herbs	x	x	X				x	x	X		
	Practical sessions											
13	Laboratory safety measuresDealing with microscope.				X	X						
14	Description of clove flower Including Macro- and micro- morphological study for entire				X	X	x				X	

	drug.							
15	 Histology of powdered clove German chamomile flower macro-, and Micro- morphology, powders and chemical identification. 		x	X	х		х	
16	• Santonica flowers macro- and, micro-morphology, powder and chemical identification.		X	X	х		x	
17	 Cinnamon bark macro- and Micro-morphology, powder and chemical identification. 		X	X	x		x	
18	 Cassia barks (Morphology, histology, powder and chemical test, when it is possible. 		X	X	х		x	
19	 Cinchona barks (Morphology, histology for entire drug powder and chemical test when it is possible. Morphological demonstration for all barks. 		X	X	х		х	
20	• Revision for powdered barks (Cinnamon, Cassia and cinchona).		X	X	x		X	
21	 Quassia wood: Macro- and micro-morphology of entire wood. Galls: Macro-morphology and micro-morphology of entire 		X	X	x		x	

	drug.								
22	Hyoscymus muticus herb: Macro- and micro-morphology of entire drug		X	Х	х		х		
23	Mentha: Macro- and micro- morphology of Powder and chemical identification		X	X	x		x		
24	• Activity (Net research on the pharmaceutical products derived from the flowers).						x	х	x

Matrix II of Pharmacognosy I

]	National Academic Reference Standards NARS	Program ILOs	Course ILOs	Course contents	Sources	Teaching and learning methods			W	eighting of a	ssessmer	ıt
						lecture	practical session	self learning	written exam	practical exam	oral exam	Period- ical exam
2.1	Principles of basic, pharmaceutical, medical, social, behavioral, management, health and environmental sciences as well as pharmacy practice.	A2	- a1 - a2 - a3	General introduction for what will be taught all over the term. Introduction for the flowers and giving the students the possible references, web sites, text books. Rest of introduction of flower. Description of clove flower Including Macro- and micromorphological study for entire drug and for powdered clove. Chamomile (German and Roman) and calendula flowers macro-and, Micromorphology of the entire and powdered	Book note	X			X		x	X

	drugs, chemical identification. Rest of flower drugs, uses, active constituents, pharmaceutical preparations						
	General introduction of bark Rest of the introduction and cinnamon bark: macro-and; micro morphology -, powder and chemical identification. Cinchona in details: macro-and; micro- morphology - powder and chemical identification. Cascarilla, quillaia, and canella bark (Morphology, histology, powder and chemical test when it is possible.	Book note	x		X	x	X

	Cascara and frangula in details: macromorphology; micromorphology powder and chemical identification. Rest of the taught barks.						
	Introduction of wood Galls: Macro- morphology of entire wood; micro- morphology-, Powder; chemical identification	Book note	x		х	x	
	- a3 Herbs introduction Official and nonofficial herbs	Book note	x		x	x	
	Identify adulteration of different plant organs using microscope and chemical tests.	Book note	х		х	х	

2.4	Principles of isolation, synthesis, purification, identification, and standardization methods of pharmaceutical compounds.	A8		Study the active constituents of medicinal flowers, barks, woods and herbs.	Book note	х		x		х	x	
2.0	Handle and dispose chemicals and		b1	Safety measures lab	Practical note				X			
3.2	pharmaceutical preparations safely	B2	b2	Dealing with microscope	Practical note				X			
	Extract, isolate,	synthesize, purify,			Examine the entire and powdered forms of different medicinal flowers, barks, wood and herbs.	Practical note				x		
3.4	identify, and/or standardize active substances from different origins.	В4	B4 b3	identification of different secondary metabolites using chemical tests	Practical note				x			
4.2	Comprehend and apply GLP,GPMP, GSP and GCP guidelines in pharmacy practice	C2	c1	Safety measures lab.	Practical note				х			
4.5	Select the appropriate methods of isolation,	C6	c2	Differentiate between drugs obtained from	book note	x		x		X	x	

	synthesis, purification, identification, and standardization of			different medicinal flowers, barks, wood and herbs in entire and powdered form.						
	active substances from different origins.		22	Study the active constituents of medicinal flowers, barks, wood and herbs.	book note	x		х	х	х
5.3	Work effectively in a team	D4	d1	Activity	Internet research		х			
	Demonstrate creativity and time management abilities	D10	d3	Activity	Internet research		x			
5.9	Implement writing and presentation skills	D11	d2	activity	Internet research		X			

COURSE SPECIFICATIONS

Histology

First level –Semester 2 2018-2019

Course Specification of Histology

University: Zagazig Faculty: Pharmacy

A- Course specifications:

Program(s) on which the course is given: Bachelor of pharmacy

(Clinical Pharmacy)

Major or Minor element of programs: Major

Department offering the program: ------

Department offering the course: Histology Department/ Faculty of

Medicine

Academic year/ Level: first level /Semester 2

Date of specification approval: September 2018

B- Basic information:

Title: Histology Code: MD203

Credit Hours: ---

Lectures: 1 hr/week

Practical: 1 hr/week

Tutorials: ---

Total: 2 hrs/week

C- Professional information:

1-Overall Aims of the Course:

On completion of the course, students will be able to describe cellular components, tissues, organs structure and staining techniques and DNA structure.

2-Intended Learning Outcomes of Histology (ILOs):

A-	Knowledge and Understanding								
a1	Outline cellular components structure and functions.								
a2	Illustrate principles of histological staining techniques.								
a3	Demonstrate different types of microscopes and their functions.								
a4	Underline DNA and chromosome structure.								
a5	Describe histological features of different tissues in normal and								
as	pathological conditions as well.								
B-]	B- Professional and Practical skills								
b 1	Use proper medical terms, abbreviation and symbols of histology.								
b2	Construct a research study and analyze the results.								
C-	Intellectual skills								
c1	Evaluate both scientific and library based information.								
D-	General and Transferable skills								
d1	Write and present reports.								
d2	Develop critical thinking, decision-making and problem-solving								
u2	skills.								

D- Contents:

Week	Lecture (1hrs/week)	Practical session
No.	, ,	(1hrs/week)
1	- Types of microscopes (LM&EM)	Projector slides for:
	Types of stains	1- types of
	Membranous organoids (cell	microscopes
	membrane, mitochondria, Golgi	2- cell membrane
	bodies, rough& smooth endoplasmic	3- mitochondria
	reticulum and lysosomes).	4- Golgi bodies
		5- rough& smooth
		endoplasmic reticulum
		6- lysosomes
2	- Non-membranous organoids	Projector slides for:
	Structure of the nucleus	1- ribosomes
		2- centriolesc
		3- cilia and falgella
		4- nucleus
		5- fat and liver
		glycogen
3	- DNA structure	Projector slides for:
	Chromosomes structure	1-Chromosomes
	Cell cycle	(krayotyping)
4	- Epithelial tissues (structure, types,	Projector slides for:
	sites)	1-Simple epithelium
_		2-Stratified epithelium
5	- Connective tissues and fibers	Projector slides for:
	(structure, types).	1-fat cells
	- Connective tissues proper	2- mast cells
	(structure, types).	3- adipose c.t.
		4- areolar c.t.
		5- yellow elastic c.t
		6- tendon

6	Midterm exam	
7	- Histological structure of bone and cartilage.	Projector slides for: 1-hyaline and elastic cartilage 2- compact decalcified,ground and spongy bones Practical exam (1)
8	- RBCs and WBCs (histological structure, function)	Projector slides for: blood film showing RBCs and leucocytes
9	- Histological structure of skeletal, smooth and cardiac muscles	Projector slides for: skeletal, smooth and cardiac muscles Activity
10	- Histological structure of neurons, synapse, neurological cells and nerve endings	Projector slides for: nerve trunk (H&E and osmic acid) Projector slides for: 1- aorta 2- medium sized artery and vein 3- basilar artery
11	- Histological structure of arteries and veins	Projector slides for: 1- thymus 2- tonsils 3- spleen 4- lymph node Projector slides for: 1- fundus and pylorus 2- small intestine 3- large intestine
12	- Histological structure of thymus, tonsils, spleen and lymph node	Projector slides for: 1- liver

		2- pancreas
		3- salivary glands
		Projector slides for:
		1- kidney
		2- trachea
		3- lung
13	- Histological structure of tongue,	Projector slides for:
	oesophagus, stomach, small and	1- pituitary gland
	large intestine	2- supra-renal gland
		3- thyroid and
		paparathyroid glands
		Practical exam (2)
14	- Histological structure of liver,	
	pancreas and salivary glands	
	- Histological structure of trachea,	
	lung and kidney	
	- Histological structure of pituitary,	
	supra-renal, thyroid and parathyroid	
	glands	
15	Final written exam	

E- Teaching and Learning Methods:

- Lectures
- Practical sessions
- Self learning (Activities)

F- Student Assessment Methods

1- Written exam	to assess	a1, a2, a3, a4, a5, c1
2- Practical exam	to assess	b1,b2,c1,d1,d2
3- Activity	to assess	c1,d1,d2

Assessment schedule:

Assessment (1): Written exam	Week 15
Assessment (2): Midterm exam	Week 6
Assessment (3): Activity	Week 9
Assessment (4): Practical exam	Week 7,13

Weighting of Assessment:

Assessment method	Marks	Percentage
Written exam	65	65%
Practical exam and activities	25	25%
Midterm exam	10	10%
TOTAL	100	100%

G- Facilities Required for Teaching and Learning:

• Black (white) board, Data show.

H- List of References:

1- Course Notes: Student book of Histology approved by Histology Department (2018)

2- Essential Books (text books)

Ross M.H.& Pawlina W.: <u>Histology: A Text and Atlas</u> (Histology (Ross)) (2010).

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Course Coordinators: Prof. Azza Saeid Ahmad

Date: /9/2018

	Matrix I of Hist	olog	y co	ours	e						
		ILOs of Histology course									
	Course Contents			Knowledge and understanding				ssional nd etical ills	Intellectual skills	transf	neral nd erable ills
	Lectures	a1	a2	a3	a4	a5	b1	b2	c1	d1	d2
1	Types of microscopes (LM&EM), types of stains, membranous organoids (cell membrane, mitochondria, Golgi bodies, rough& smooth endoplasmic reticulum and lysosomes).	х	X	X							
2	Non-membranous organoids, structure of the nucleus	Х									
3	DNA structure, chromosomes structure, cell cycle				X				X		
4	Epithelial tissues (structure, types, sites)					X					
5	Connective tissues and fibers (structure, types), connective tissues proper (structure, types)					X					
6	Histological structure of bone and cartilage					X					
7	RBCs and WBCs (histological structure, function)					X					
8	Histological structure of skeletal, smooth and cardiac muscles					X					
9	Histological structure of neurons, synapse, neurological cells and nerve endings					X			X		
10	Histological structure of arteries and veins					X					
11	Histological structure of thymus, tonsils, spleen and lymph node					х					
12	Histological structure of tongue, oesophagus, stomach, small and large intestine					X					
13	Histological structure of liver, pancreas and salivary glands					X					
14	Histological structure of trachea, lung and kidney Histological structure of pituitary, supra-renal, thyroid and parathyroid glands										
						X					

	Practical sessions						
1	Projector slides for:types of microscopes, cell membrane, mitochondria, Golgi bodies, rough& smooth endoplasmic reticulum and lysosomes			X			
2	Projector slides for: ribosomes, centriolesc, cilia and falgella, nucleus, fat and liver glycogen			X			
3	Projector slides for: Chromosomes (krayotyping)			X			
4	Projector slides for: Simple epithelium, Stratified epithelium				X		
5	Projector slides for: fat cells, mast cells, adipose c.t., areolar c.t., yellow elastic c.t, tendon				X		
6	Projector slides for: hyaline and elastic cartilage, compact decalcified, ground and spongy bones				X		
7	Projector slides for: blood film showing RBCs and leucocytes				х		
8	Projector slides for: skeletal, smooth and cardiac muscles				Х		
9	Projector slides for: nerve trunk (H&E and osmic acid)				X		
10	Projector slides for: aorta, medium sized artery and vein, basilar artery				X		
11	Projector slides for: thymus, tonsils, spleen, lymph node				X		
12	Projector slides for: fundus and pylorus, small intestine, large intestine				x		
13	Projector slides for: liver, pancreas, salivary glands				X		
14	Projector slides for: kidney, trachea, lung				X		

1	Projector slides for: pituitary gland, supra-renal gland, thyroid and paparathyroid glands				X			
1	6 Activity					X	X	X

Matrix II of Histology

	National Academic			Course		Teaching and learning methods			Method of assessment		
	Reference Standards NARS	ILOs	ILOs	contents	Sources	Lecture	Practical session	Self learning	Written exam	Practical exam	
2.1	Principles of basic, pharmaceutical, medical, social, behavioral, management, health and environmental sciences as well as pharmacy practice.	A3	a1 a2 a3	Types of microscopes (LM&EM), types of stains, membranous organoids (cell membrane, mitochondria, Golgi bodies, rough& smooth endoplasmic reticulum and lysosomes). Non-membranous organoids, structure of the nucleus Epithelial tissues (structure, types, sites) connective tissues and fibers (structure, types), connective tissues proper (structure, types) Histological structure of bone and cartilage RBCs and WBCs	Student book	X			X		

		(histological structure,	ĺ		ĺ		
		function)					
		Histological structure					
		of skeletal, smooth and					
		cardiac muscles					
		Histological structure					
		of neurons, synapse,					
		neurological cells and					
		nerve endings					
		Histological structure					
		of arteries and veins					
		Histological structure					
		of thymus, tonsils,					
		spleen and lymph node					
		Histological structure					
		of tongue, oesophagus,					
		stomach, small and					
		large intestine					
		Histological structure					
		of liver, pancreas and					
		salivary glands					
		Histological structure					
		of trachea, lung and					
		kidney					
		Histological structure					
		of pituitary, supra-					
		renal, thyroid and					
		parathyroid glands					

2.11	Principles of body function in health and disease states as well as basis of genomic and different biochemical pathways regarding their correlation with different diseases.	A 16	a4	DNA structure, chromosomes structure, cell cycle	Notebook	X			X	
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3.1	Use the proper pharmaceutical and medical terms and abbrevations and symbols in pharmacy practice	B1	b1	Projector slides for:types of microscopes, cell membrane, mitochondria, Golgi bodies, rough& smooth endoplasmic reticulum and lysosomes Projector slides for: ribosomes, centriolesc, cilia and falgella, nucleus, fat and liver glycogen Projector slides for: Chromosomes (krayotyping)	Practical Notes	X		X
3.11	Conduct research studies and analyze the results	B17	b2	Projector slides for: Simple epithelium,Stratified epithelium Projector slides for: fat cells, mast cells, adipose c.t., areolar c.t., yellow elastic c.t, tendon Projector slides for: hyaline and elastic cartilage, compact decalcified, ground and spongy bones Projector slides for: blood film showing RBCs and leucocytes	Practical Notes	x		x

				Projector slides for: skeletal, smooth and						
				cardiac muscles						
				Projector slides for:						
				nerve trunk (H&E and						
				osmic acid)						
				Projector slides for:						
				aorta, medium sized						
				artery and vein, basilar						
				artery						
				Projector slides for:						
				thymus, tonsils, spleen,						
				lymph node						
				Projector slides for:						
				fundus and pylorus,						
				small intestine, large						
				intestine						
				Projector slides for:						
				liver, pancreas, salivary						
				glands						
				Projector slides for:						
				kidney, trachea, lung						
				Projector slides for:						
				pituitary gland, supra-						
				renal gland,						
				thyroid and						
				paparathyroid glands						
	Analyze and			Activity	G: 1 :					
	interpret			DNA structure,	Student					
4.12	experimental	C15	.1	chromosomes structure,	book,					
4.13	results as well	C15	c1	cell cycle, Histological	essential	X	X	X	X	X
	as published literature			structure of neurons,	book, internet					
	merature			synapse, neurological	memet					
				cells and nerve endings						

5.9	Implement writing and presentation skills	D11	d1	Activity	Internet	x	x	x	
5.10	Implement writing and thinking, problem- solving and decision- making abilities.	D12	d2	Activity	Internet	x	X	x	-

Course Coordinators: Prof. Azza Saeid Ahmad

Date: /9/2018

COURSE SPECIFICATIONS

Physical Pharmacy
First level –Semester 2
2018-2019

Course specification of physical pharmacy

University: Zagazig Faculty: Pharmacy

A- Course specifications:

Program (s) on which the course is given: Bachelor of pharmacy (clinical

pharmacy)

Major or Minor element of programs: Major

Department offering the program: ------

Department offering the course: Pharmaceutics Dept.

Academic year Level: level 1, semester 2

Date of specification approval: 26/11/2018

B- Basic information:

Title: Physical pharmacy Code: PT201

Credit Hours: ---

Lectures: 2 hrs/week

Practical: 1 hrs/week

Tutorials: ---

Total: 3 hrs/week

C- Professional information:

1-Overall aim of the course

On completion of the course, the student will be able to identify the principal of physical pharmacy of matter such as state of matter, and rheology in pharmacy. Surface tension and adsorption phenomena.

2-Intended Learning Outcomes of Physical pharmacy (ILOs):

A- Kno	owledge and Understanding						
a1	Enumerate types of (flow, surfactants and adsorption)						
a2	Define buffer, isotonicity, kinetic molecular theory, solubility and colligative properties of solution						
a3	Outline the state of matter, application of viscosity and surface tension in						
	pharmacy						
a4	Outline different pharmaceutical calculations related to buffer , pH and						
ат	isotonicity of different solutions						
B- Pro	fessional and Practical Skills						
b ₁	Measure the viscosity, surface tension of different solutions and						
O _I	adsorption of active agent on adsorbate						
b_2	Determine the solubility of pharmaceutical materials						
C- Inte	ellectual Skills						
c1	Distinguish between different classes of surface active agents, different						
CI	types of flow and adsorption.						
c2	Evaluate different state of matter and its colligative properties						
D- Ger	neral and Transferable Skills						
d1	Work effectively in a team						
d2	Develop the decision making and problem solving abilities						
d3	Communicate effectively both in oral and written manners						

D- Contents

Week No.	Lecture contents (2hrs/week)	Practical session
Week No.	Lecture contents (2Hrs/week)	
		(1 hr /week)
1	State of matter and intermolecular	Introduction to Lab safety and
	forces:	equipment
		Coloulate the collinative
2	Colligative properties of different states,	Calculate the colligative
	Phase equilibrium and Phase rule	properties of solutions
3	Solubility and factors affecting the	Solubility expression and
	solubility	determine of solubility of certain
		pharmaceutical agent
4	Di Lii Lii Lii Lii Lii Lii Lii Lii Lii L	D
4	Dissolution phenomena and partition coefficient	Determine of solubility of certain
	Coefficient	pharmaceutical agent
5	Rheology	Determine of viscosity of certain
		liquids
6	Midterm exam	
•		
7	Rheology	Determine of viscosity of certain
		liquid
8	Surface tension and Interfacial	Determination of surface tension
	phenomenon	of liquids
9		Determination of surface tension
,	Surface tension and Interfacial	of liquids
	phenomenon	-
10	Adsorption	Determination of percentage of
		adsorbed substances
11	Isotonicity	Problems on isotonicity
12		Problems on Buffer
	Buffer	
13	Application of physical pharmacy in	Practical Exam
	pharmaceutical field	
14	Revision	
1.7	Einel arous	
15	Final exam	
		1

E- Teaching and Learning Methods:

Lectures

Practical session

F- Student Assessment methods:

1-Written exams to assess: a1, a2, a3, a4, c1, c2

2- Practical exams to assess: b1, b2

3- Activity within labs: d1, d2

3- Oral exam to assess: a1, a2, a3, a4, c1, c2, , d3

Assessment schedule

Assessment (1): Periodical exam	Week 6
Assessment (2): Final written exam	Week 15
Assessment (3): Practical exam	Week 13
Assessment (4):Oral exam	Week 15

Weighting of Assessment

Assessment method	Marks	Percentage
Written exam	50	50%
Mid term	10	10%
Practical exam and activities	25	25%
Oral exam	15	15%
TOTAL	100	100%

G- Facilities required for teaching and learning:

For lectures: Black (white) boards, data show

For labs: Chemicals, glass ware, digital balance, water bathes, viscometer and stallagmometer

H- List of References:

1- Course Notes: Student book of physical pharmacy approved by pharmaceutics

department 2018

2- Essential Books:

- i- ATTWOOD, D. & FLORENCE, A. T. 2012. FAST track Physical Pharmacy, Pharmaceutical Press.
- ii- Aulton, Michael E. Pharmaceutics: The Science of Dosage Form Design. 2 nded.Churchill, 2002

3- Recommended Books

i- Applied physical pharmacy, Mansoor M. Amiji, Beverly J. Sandmann, McGraw-Hill,(2003).

Course Coordinator: Hanan Mohamed Elnahas

Head of Department: Nagia Ahmed El-megrab

تم مناقشة و اعتماد توصيف المقرر من مجلس القسم بتاريخ: 26/11/2018

	N	Iatr	ix I (of Phy	sical _]	pharr	nacy	cou	rse			
			ILOs of Physical pharmacy course									
	Course Contents	Knowledge and understanding			Professiona l and practical skills		Intellectual skills		Transferable and general skills			
	Lectures	a1	a2	a3	a4	b1	b2	c1	c2	d1	d2	d3
1	State of matter and intermolecular forces: -Types of inter and intra molecular forces		X	X								
2	State of matter: -Gaseous state, Liquid state and solid state		x	Х								
3	Phase equilibrium and Phase rule		x	X					X			
4	Rheological flow characteristics of liquids and semi-solids:	X						x	X			
5	The rheology of solid and factors affecting viscosity	X						x	X			
6	Surface and Interfacial phenomenon	X										
7	Surface characteristics and surface active agents	X					X	x				

8	Adsorption	X	x				X			
9	Solubility of solid in liquid	X	X				X			
10	Properties of solutions	X	X				X			
11	Isotonic solutions	Х	X	Х			X			
12	Buffer solutions	Х	Х	Х			X			
	Practical Session									
13	Determination of viscosity of certain liquids				X			х	х	x
14	Determination of surface tension of liquids					X		X	X	Х
17	Determination of percentage of adsorbed substances					X	Х	X	х	х
18	Determination of solubility of certain substances					Х		х	X	X
19	Solve problems of pharmaceutical buffer solutions						X	х	X	Х
20	Solve problems of isotonic solutions					х	х	X	х	Х

		Matrix	II of Physical	pharmac	y cou	rse			
NARS	NARS Program Course ILOS Course con	Course content	Sources	lear	ing and ning hods	Method of assessment			
	ILOS	ILOS			Lecture	Practical session	Written exam	Practical exam	Oral exam
2.1 Principles of basic, pharmaceutical, medical, social, behavioral, management, health and environmental sciences as well as pharmacy practice.	A2	a1	Rheological flow characteristics of liquids and semisolids The rheology of pharmaceutical dosage forms Surface and Interfacial phenomenon Surface characteristics and surface active agents Adsorption Solubility of solid in liquid Properties of solutions Buffer solutions Isotonic	Student book Essential books	X		X		X

			solutions]					
			Solubility of solid in liquid	Student					
		a_2	Properties of solutions Buffer solutions	book Essential books	X		X		X
			Isotonic solutions						
2.2 Physical-chemical properties of various substances used in preparation of medicines including inactive and active ingredients as well as biotechnology	A5	a 3	State of matter and intermolecular forces: -Types of inter and intra molecular forces State of matter: -Gaseous state, Liquid state and solid state	Student book Essential books	X		X		X
and radio- labeled products.		a3	Surface and Interfacial phenomenon Adsorption	Student book Essential books	х		х		х
3.3 Compound, dispense, label, store and	В3	b ₁	Measure the viscosity of solution	Practical notes		x		X	

distribute medicines effectively and safely.		b ₂	Measure surface tension of liquids Measure the percentage of adsorbate Determination of solubility of certain substances	Practical notes Practical notes		X X		x x	
4.13 Analyze and interpret experimental results as well as published literature.	C15	C1	Distinguish between Rheological flow characteristics of pharmaceutical dosage forms Select different Surface characteristics and surface active agents Adsorption types	Student book Essential books Internet	X		x		X

		c2	Solve problems of pharmaceutical buffer solutions Solve problems of isotonic solutions Colligative properties of different phases	Practical notes	X	X	X	X	
5.1 Communicate clearly by verbal and means. 5.3 Work effectively in a team.	D1	d3 d1	Solve problems of viscosity of certain liquids Problem solve of surface tension calculation Determination of percentage of adsorbed substances	Practical notes		X		x	X

5.10 Implement writing and thinking, problem- solving and decision- making abilities	d2	Determination of solubility of certain substances Solve problems of pharmaceutical buffer solutions Solve problems of isotonic solutions				
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Course Coordinator: Hanan Mohamed El nahas

Head of Department: Nagia Ahmed El-megrab

تم مناقشة و اعتماد توصيف المقرر من مجلس القسم بتاريخ26/11/2018:

COURSE SPECIFICATIONS

Pharmacy Orientation
First level –Semester 2
2018-2019

Course specification of pharmacy orientation

University: Zagazig Faculty: Pharmacy

A- Course specifications:

Program (s) on which the course is given: Bachelor of pharmacy (Clinical

pharmacy)

Major or Minor element of programs: Major

Department offering the program: ------

Department offering the course: Pharmaceutics Department

Academic year Level: First level / semester 2

Date of specification approval: November 2018

B- Basic information:

Title: Pharmacy orientation Code: PT202

Credit Hours: ---

Lectures: 1 hrs/week

Practical: 0

Tutorials: ---

Total: 1 hrs/week

C- Professional information:

1-Overall aim of the course

On completion of the course, the student will be able to recognize the mission of pharmacy, role and the responsibility of pharmacists at various pharmacy sittings, pharmacy careers, educational requirements and ethical framework of pharmacy, drug information sources, national and international pharmaceutical organizations and the principles and steps of pharmaceutical products development process. Illustrate the different dosage forms and their routes of administration as well as pharmacy history.

Intended Learning Outcomes of Pharmacy Orientation:

A- Kno	A- Knowledge and Understanding							
	Define different concepts related to pharmacy profession, duties of							
a1	pharmacist at various pharmacy sittings, drug information sources and							
aı	various pharmaceutical and medical terms, as well as drug, medicine							
	and excipients							
a2	Identify the pharmacy careers, educational requirements and ethical							
az	framework of pharmacy							
a3	Describe the principles and steps of new pharmaceutical products							
a5	development process							
a4	Enumerate different types of dosage forms and their routes of							
a4	administration as well as factors affecting drug dosage							
a5	Summarize the history of pharmacy							
b- Pro	fessional and practical							
b1	Use pharmaceutical terminology effectively							
b2	Interpret different medication orders							
C- Inte	ellectual skills							
\mathbf{c}_1	Solve different problems related to pharmaceutical incompatibilities							
D- Ger	neral and Transferable skills							
d_1	Develop the decision making and problem solving abilities							
d2	Communicate effectively in a written and verbal manner							

Course Content of Pharmacy Orientation:

Week No.	Lecture contents (1 hrs/lec.)
1	Introduction to pharmacy:
	-Pharmacy profession, pharmaceutics, pharmacists, pharmacy education,
	Pharmaceutical organizations
3	- Drug information sources (Pharmacopeias and Formularies)
3	Pharmacy careers and role of pharmacists
	-Ethics in pharmacy
4	Drug and medicine:
	Definition of drugs, medicines and excipients, drug characteristics, sources,
	nomenclatures, Drug classifications and steps of pharmaceutical products
	development
5	Medical and pharmaceutical terminology
	•
6	Routes of drug administration
7	Periodical exam
8	Introduction to pharmaceutical dosage forms
9	Introduction to pharmaceutical dosage forms
10	Drug Dosage, Factors affecting dose
11	Systems of weight and measures
12	Medical Prescription and medication order and their interpretation
13	Incompatibility in prescription
14	History of pharmacy -
	 نبذة عن تاريخ الصيدلة و الدواء فضل العرب والمسلمين على الدواء والمداواة
	-الدواء وبلاد ما بين النهرين- المصريين القدماء
15	Final written exam

Teaching and Learning Methods:

- Lectures
- Interactive discussion (circulating questions)

Student Assessment methods:

• Midterm & final written exam to assess: a1,a2,a3,a4,a5,b1, b2, c1, d1,d2

Assessment schedule:

Assessment (1): Periodical exam	Week 7				
Assessment (2): Written exams	Week 15				

Weighting of Assessment:

Assessment method	Marks	Percentage
Written exam	75	75%
Periodical exam	25	25%
TOTAL	100	100%

Facilities required for teaching and learning:

- For lectures: Black (white) boards, data show

List of References:

- **1. Course Notes:** Student book of pharmacy orientation approved by pharmaceutics department (2018).
- 2- Essential Books (Textbooks):
- ✓ Pharmaceutical dosage forms and drug delivery systems (1995), Ansel,
 H. c., Popovich, N. G., Allen, L. V. 6th edition, Williams and Wilkins.
- ✓ Pharmaceutical calculations, Stoklosa, M and Ansel, H., Philadelphia, London. (1997).
- ✓ Remington: the Science and Practice of Pharmacy" Genars, Alfonso R edition, 2000.

Course Coordinator: Nagia Ahmed El-megrab Head of Department: Nagia Ahmed El-megrab

تم مناقشة و اعتماد توصيف المقرر من مجلس القسم بتاريخ 26 / 11 / 2018 م

Matrix I of pharmacy orientation course

	Course contents		Knowledge and understanding			Profes and pr	ssional actical	Intellectual skills	transf	ral and Terable ills	
		a1	a2	a3	a4	a5	b1	b2	c1	d1	d2
	Introduction to pharmacy:										
	Pharmacy profession, pharmaceutics, pharmacists,										
	pharmacy education, Pharmaceutical										
	organizations										
	Drug information sources (Pharmacopeias and										
1	Formularies)	X									
	Pharmacy careers and role of pharmacists										X
2	Ethics in pharmacy		X								
	Drug and medicine:										
	Definition of drugs, medicines and excipients,										
	drug characteristics, sources, nomenclatures,										
	classifications and steps of pharmaceutical										
3	products development	X		X							
	Medical and pharmaceutical terminology						X				
4		X									
5	Routes of drug administration	X			X					X	X
6	Introduction to pharmaceutical dosage forms	X			X						
	Drug Dosage, Factors affecting dose									X	X
7	Systems of weight and measures	X									

8	Medical Prescription and medication order and their interpretation Medical and pharmaceutical terminology	X			X			X
							X	X
9	Incompatibility in prescription					X		
11	نبذة عن تاريخ الصيدلة			X				
12	فضل العرب والمسلمين على الدواء والمداواة			X				
13	الدواء وبلاد ما بين النهرين- المصريين القدماء			X				

Matrix II of pharmacy orientation course

	National Academic Reference Standards Program				Sources	Teacl	Teaching and learning methods		Method of assessment		ment
Ke	(NARS)	ILOs	ILOs	contents	Sources	Lecture	Practical session	Self learning	Written exam	Practical exam	Oral exam
2.1	Principles of basic, pharmaceutical, medical, social, behavioral, management, health and environmental sciences as well as pharmacy practice.	A2	a1	Introduction to pharmacy: Pharmacy profession, pharmaceutics, pharmacy education, Pharmaceutical organizations Drug information sources (Pharmacopeias and Formularies) Introduction to pharmacy profession,	Student book Student book	x			x		

		pharmaceutics, pharmacists, pharmacy education, Pharmaceutical organizations Drug information sources (Pharmacopeias and Formularies)					
		Medical and pharmaceutical terminology	Student book Essential books	X		X	
		Routes of drug administration	Student book Essential books	X		X	
		Introduction to pharmaceutical dosage forms	Student book	X		X	
	a1	Drug Dosage, Factors affecting dose, system weight and measures	Student book	X		X	

		Medical Prescription and medication order and their interpretation Medical and pharmaceutical terminology	Student book	X		X	
	a2	Ethics in pharmacy	Student book	X		X	
	a3	nomenclatures, classifications and steps of pharmaceutical products development	Student book	X		X	
	a5	فرزة عن تاريخ	Student book	X		X	

				فضل العرب والمسلمين على الدواء والمداواة الدواء وبلاد ما بين النهرين- المصريين القدماء					
	Properties of different			Routes of drug administration	Student book	X		X	
2.6	pharmaceutical dosage forms including novel drug delivery systems	A10	a4	Introduction to pharmaceutical dosage forms	Student book	x		X	

2.21	Regulatory affairs, pharmacy laws and ethics of health care and pharmacy profession.	A31	a2	Identify the pharmacy careers, educational requirements and ethical framework of pharmacy	Student book	x		x	
3.1	Use the proper pharmaceutical and medical terms and abbrevations and symbols in pharmacy practice.	B1	b1 b2	Medical Prescription and medication order and their interpretation Medical and pharmaceutical terminology	Student book Essential books Internet	X		x	
4.4	Recognize and control possible physical and/or chemical incompatibilities that may occur during drug dispensing.	C4	c1	Incompatibility in prescription	Student book	X		X	
5.1	Communicate clearly by verbal and writing means.	DI	d2	-Medical and pharmaceutical terminology Prescription and medication order and their interpretation	Student book	X		X	

5.10	Implement writing and thinking, problem- solving and decision-making abilities.	D12	d1	Incompatibility in prescription Drug Dosage, Factors affecting dose,	Student book	X		X	

Course Coordinator: Nagia Ahmed El-megrab Head of Department: Nagia Ahmed El-megrab

م 2018 / 11 / 26 تم مناقشة و اعتماد توصيف المقرر من مجلس القسم بتاريخ

COURSE SPECIFICATIONS

Human rights

First level –Semester 2 2018-2019

توصيف مقرر حقوق الإنسان و أخلاقيات المهنة

كلية الصيدلة جامعة الزقازيق أ- مو اصفات المقرر:

البرنامج أو البرامج التي يقدم من خلالها المقرر: بكالوريوس الصيدلة (برنامج الصيدلة الاكلينيكية)

المقرر يمثل عنصرا رئيسيا أو ثانويا بالنسبة للبرامج: ثانوياً

القسم العلمي المسئول عن البرنامج: ______

د. ياسمين أحمد شرف

الكود: HR 201

المسئول عن تدريس المقرر: د.مي احمد محمد

السنة الدراسية: المستوى الأول - التيرم الثاني.

تاريخ اعتماد التوصيف:

(ب) البيانات الأساسية:

العنوان: حقوق الإنسان و أخلاقيات المهنة

الساعات المعتمدة: ---

المحاضر ات: ساعتان أسبو عيا

العملي: ---

الدروس العملية: ___

المجموع: 2 ساعة في الأسبوع

(ج) البيانات المهنية:

1) الأهداف العامة للمقرر:

عند إتمام المقرر سوف يكون الطلاب قادرين على

- معرفة أهمية حقوق الإنسان وواجباته نحو المجتمع وكيفية حماية تلك الحقوق.
 - معرفة الفساد وانواعه واسبابه واثاره وكيفية مجابهة الفساد

2) النتائج التعليمية المستهدفة لمقرر حقوق الإنسان:

لمعرفة والفهم	
يعرف المقصود بحقوق الإنسان ومصدرها وأنواع حقوق الإنسان الفردية والجماعية وكيفية حمايتها	11
	1
يفهم الفساد وانواعه واسبابه واثاره	اً 2
يعرف كيفية مجابهة الفساد ودور الاجهزة الرقابية في مجابهة الفساد داخل الدولة	31
مهارات العامة والمنقولة	د_ الـ
يعمل بكفاءة كأحد أفراد الفريق.	د1

ينمي شخصية الفرد من خلال معرفة الحقوق الفردية و الجماعية للإنسان.	د2
بنمي مهار ات التفكير النقدي و اتخاذ القرار ات و حل المشكلات.	3

د_ المحتويات:

المحاضرة (2ساعة/ الأسبوع)	الأسبوع
<u> </u>	1
- معدمه -التطور التاريخي لفكرة حقوق	1
الإنسان	
، م التعريف بحقوق الإنسان - التعريف بحقوق الإنسان	2
- خصائص و مبادئ حقوق	2
الإنسان	
مصادر حقوق الإنسان	3
أنواع حقوق الإنسان الفردية	4
والجماعية	_
ـ مكافحة الفساد	5
مفهوم الفساد	
-أنواع وصور الفساد	
- أسباب الفساد	6
امتحان نصف الفصل	
- آثار الفساد	7
- وسائل مجابهة الفساد	8
الإطار التشريعي لمكافحة الفساد	
- دور الأجهزة الرقابية الوطنية في	9
مكافحة الفساد الإداري	
-هيئة الرقابة الإدارية ودورها في	
مكافحة الفساد الإداري.	
- الجهاز المركزي للمحاسبات	10
ودوره في مكافحة الفساد الإداري	
- الجهاز المركزي للتنظيم والإدارة	11
ودوره في مكافحة الفساد الإداري	10
- هيئة النيابة الإدارية ودورها في	12
مكافحة الفساد الإداري - اللجان الأخرى المعنية بمكافحة	12
	13
الفساد فجمهورية مصر العربية: - مراجعة عامة و مناقشة حره	14
- مراجعه عامه و منافسه خره - الامتحان النهائي	15
- الامتحال التهائي	15

هـ أساليب التعليم و التعلم:

• المحاضرة

- المناقشة
- المقرر الكتروني Internet

و-أساليب تقييم الطلبة:

1- الامتحان التحريري يقيم: أ1و أ2و أ3و د1و د2 و د3

2- الامتحان نصف الفصل يقيم: أ1و أ2و أ3و د1و د2 و د3

الجدول الزمنى التقييم:

الأسبوع السادس	تقييم (1): امتحان نصف الفصل
الأسبوع الخامس عشر	تقييم (2): الامتحان التحريري

ترجيح التقييم:

النسب المئوية	الدرجات	طريقة التقييم
%90	90	الامتحان التحريري
%10	10	امتحان نصف الفصل
%100	100	الإجمالي

ز- التسهيلات اللازمة للتعليم و التعلم:

1- للمحاضرات: اللوحات (البيضاء) و السوداء و جهاز العرض المرئي (داتا شو) والانترنت.

ي- قائمة المراجع:

1-الانترنت: المقرر الالكتروني

2- كتب مقترحة

القانون الدولي الإنساني

4- مجلات دورية، مواقع انترنت، الخ

مجلات حقوق الإنسان

منسق المقرر: د. ياسمين أحمد شرف التاريخ:

مصفوفة 1 مقرر حقوق الإنسان و أخلاقيات المهنة							
نتائج التعلم المنشودة لمادة حقوق الإنسان				ج التعا	نتا	محتويات المقرر	
مهارات عامة و الفهم تواصلية		الم					
34	د2	14	31	اً 2	11		
					X	- مقدمة -التطور التاريخي لفكرة حقوق الإنسان	1
					X	- التعريف بحقوق الإنسان - خصائص و مبادئ حقوق الإنسان	2
					Х	مصادر حقوق الإنسان	3
X	Х	X			Х	أنواع حقوق الإنسان الفردية والجماعية	4
				Х		 مكافحة الفساد(مفهوم الفساد-أنواع وصور الفساد) 	5
				X		ـ أسباب الفساد	6
				х		- آثار الفساد	7
X	Х	X	X			- وسائل مجابهة الفساد(الإطار التشريعي لمكافحة الفساد)	8
			х			- دور الأجهزة الرقابية الوطنية في مكافحة الفساد الإداري -هيئة الرقابة الإدارية ودور ها في مكافحة الفساد الإداري.	9
			X			- الجهاز المركزي للمحاسبات ودوره في مكافحة الفساد الإداري	10
			X			 الجهاز المركزي للتنظيم والإدارة ودوره في مكافحة الفساد الإداري 	11
			X			 - هيئة النيابة الإدارية و دور ها في مكافحة الفساد الإداري 	12
			X			- اللجان الأخرى المعنية بمكافحة للفساد فجمهورية مصر العربية:	13
X	x	Х	X	x	x	مراجعة عامة و مناقشة حره	14

مصفوفة 2 مقرر حقوق الإنسان و أخلاقيات المهنة

					, , , ,				
أسلوب التقييم	أساليب التعليم و التعلم			المصدر	محتويات المقرر	نتائج التعلم	نتائج التعلم	الير الأكاديمية المرجعية	المع
الامتحان التحريري	التعلم الذاتي	الدروس العملية	المحاضرة	المصدر	معتویات استرر	المنشودة للمقرر	المنشودة للبرنامج	القومية (NARS)	
X			X	المقرر الالكتروني	- مقدمة -التطور التاريخي لفكرة حقوق الإنسان				
Х			х	المقرر الالكتروني	- التعريف بحقوق الإنسان - خصائص و مبادئ حقوق الإنسان				
X			X	المقرر الالكتروني	مصادر حقوق الإنسان	11			
X			X	المقرر الالكتروني	أنواع حقوق الإنسان الفردية والجماعية		4 İ	الإداره و الصحة و العلوم البيئية فضلا عن ممارسة	2.1
X			x	المقرر الالكتروني	- مكافحة الفساد(مفهوم الفساد-أنواع وصور الفساد)			الصيدلة	
X			X	المقرر الالكتروني	- أسباب الفساد	21			
X			X	المقرر الالكتروني	- آثار الفساد				
X			X	المقرر الالكتروني	- وسائل مجابهة الفساد(الإطار التشريعي لمكافحة الفساد)				
х			х	المقرر الالكتروني	- دور الأجهزة الرقابية الوطنية في مكافحة الفساد الإداري -هيئة الرقابة الإدارية ودور ها في مكافحة	31			

			الفساد الإداري.				
		المقرر	i vela i ii e i i ii				
X	x	الالكتروني	- الجهاز المركزي للمحاسبات ودوره في مكافحة الفساد الإداري				
Х	X	المقرر الالكتروني	- الجهاز المركزي للتنظيم والإدارة ودوره في مكافحة الفساد الإداري				
х	X	المقرر الالكتروني	- هيئة النيابة الإدارية ودور ها في مكافحة الفساد الإداري				
х	x	المقرر الالكتروني	- اللجان الأخرى المعنية بمكافحة للفساد فجمهورية مصر العربية:				
х	x	المقرر الالكتروني	أنواع حقوق الإنسان الفردية والجماعية				
х	x	المقرر الالكتروني	- مكافحة الفساد(مفهوم الفساد-أنواع وصور الفساد)				
х	x	المقرر الالكتروني	- أسباب الفساد -				
х	x	المقرر الالكتروني	- اللجان الأخرى المعنية بمكافحة للفساد فجمهورية مصر العربية:				
X	X	المقرر الالكتروني	أنواع حقوق الإنسان الفردية والجماعية			يعمل بكفاءة كأحد أفراد الفريق	5.3
х	x	المقرر الالكتروني	- مكافحة الفساد(مفهوم الفساد-أنواع وصور الفساد)	12	42		
X	x	المقرر الالكتروني	ـ أسباب الفساد				

x		X	المقرر الالكترون <i>ي</i>	- مقدمة -التطور التاريخي لفكرة حقوق الإنسان				
х		X	المقرر الالكتروني	- التعريف بحقوق الإنسان - خصائص و مبادئ حقوق الإنسان	د2	د9	ينمي المهارات الإدارية و التي تشمل التمويل و التسويق و	5.7
х		X	المقرر الالكتروني	مصادر حقوق الإنسان			المبيعات	
х		X	المقرر الالكتروني	أنواع حقوق الإنسان الفردية والجماعية				
x		X	المقرر الالكتروني	- مكافحة الفساد(مفهوم الفساد-أنواع وصور الفساد)				
х		X	المقرر الالكتروني	- أسباب الفساد				
х		X	المقرر الالكتروني	- آثار الفساد	د3	د12	ينمي مهارات التفكير النقدي و حل المشكلات و اتخاذ القرارات	5.10
			المقرر الالكتروني	- وسائل مجابهة الفساد(الإطار التشريعي لمكافحة الفساد)				
Х		X						

منسق المقرر: د. ياسمين أحمد شرف رئيس القسم: التاريخ: \2018/9