

# **COURSE SPECIFICATIONS**

## **Faculty of Pharmacy**

**First year – Second Term**

**2018-2019**

# **CONTENTS:**

	<b>Course</b>	<b>Page No.</b>
<b>1</b>	<b>Analytical chemistry (2)</b>	<b>3</b>
<b>2</b>	<b>Pharmaceutical organic chemistry (2)</b>	<b>13</b>
<b>3</b>	<b>Pharmacognosy (1)</b>	<b>26</b>
<b>4</b>	<b>Pharmaceutics (2)</b>	<b>41</b>
<b>5</b>	<b>Mathematics and Statistics</b>	<b>56</b>
<b>6</b>	<b>Human Rights and Professional Ethics</b>	<b>67</b>

**COURSE  
SPECIFICATIONS**

**Analytical Chemistry-2**

**First year – second Term  
2018-2019**

# **Course Specification of Analytical Chemistry -2**

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**University:** Zagazig

**Faculty:** Pharmacy

## **A- Course specifications:**

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

Major or Minor element of programs: Major

Department offering the program: -----

Department offering the course: Analytical Chemistry Department

Academic year / Level: First year / Second term

Date of specification approval : 29-8-2018

## **B- Basic information:**

Title: Analytical Chemistry -2 Code: AC122

Credit Hours: ---

Lectures: 1 hr/week

Practical: 2 hrs/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 explain fundamentals of qualitative analysis of different inorganic compounds (anions) : Carbonates and bicarbonates, Sulfur containing anions, Halides, Cyanogen anions, Arsenic containing anions, Phosphates and nitrates to overcome difficulties encountered during anions separation: oxidizing agents, phosphates, insoluble matters, organic matters.

## 2-Intended Learning Outcomes of Analytical Chemistry -1:

<b>A- Knowledge and Understanding</b>	
a1	Summarize principles of qualitative analysis of anions.
a2	Describe methods of identification and separation of groups of anions.
a3	Recognize difficulties encountered during separation of metal ions
<b>B- Professional and Practical Skills</b>	
b1	Handle and dispose chemicals safely.
b2	Separate and identify various groups of anions.
<b>C- Intellectual Skills</b>	
c1	Apply qualitative analysis techniques for separation of anions.
c2	Solve difficulties encountered during separation of metal ions
<b>D- General and Transferable Skills</b>	
d1	Develop critical thinking and decision making skills

## D- Contents:

Week No.	Lecture ( 1 hr/week)	Practical Session ( 2 hrs/week)
1	- Carbonates and bicarbonates	- Laboratory safety measures - Accreditation and quality appraisal
2	- Sulfur containing anions	Carbonates and bicarbonates mixture
3	- Sulfur containing anions	Separation of Sulfur containing anions
4	- Halides	Separation of Sulfur containing anions
5	- Cyanogen anions	Separation of halide gp anions
6	Cyanogen anions	Separation of halide gp anions
7	Midterm	
8	-Arsenic & phosphate containing anions	Separation of cyanogen gp anions
9	-Arsenic & phosphate containing anions	Separation of cyanogen gp anions
10	- Nitrogen containing anions	Separation of Arsenic & phosphate gp anions
11	- Difficulties: Oxidizing agents	Revision I
12	- Difficulties: Phosphates	Revision II

<b>13</b>	- Difficulties: Insolubles	<b>-Practical exam</b>
<b>14</b>	- Difficulties: Organic matter	
<b>15</b>	Final written exam	

## E- Teaching and Learning Methods:

- Lectures
- Practical sessions
- Critical thinking through laboratory sessions

## F- Student Assessment Methods:

- 1- Written exam      to assess      a1, a2, a3, c2, d1  
 2- Practical exam      to assess      b1, b2, c1, c2, d1  
 3- Oral exam      to assess      a1, a2, a3, c2, d1

### Assessment Schedule:

<b>Assessment (1):</b> Final written exam	Week 15
<b>Assessment (2):</b> Practical exam	Week 13
<b>Assessment (3):</b> Oral exam	Week 15

### Weighting of Assessment:

Assessment method	Marks	Percentage
<b>Written exam</b>	30	60%
<b>Practical exam</b>	10	20%
<b>Oral exam</b>	10	20%
<b>TOTAL</b>	50	100%

## G- Facilities Required for Teaching and Learning:

- Black (white) board, Data show, Laboratory equipment and Chemicals.

## H- List of References:

### 1- Course Notes:

- Student book of analytical chemistry-2 approved by analytical chemistry department (2018)
- Practical notes approved by analytical chemistry department (2018)

## **2- Essential Books**

- G. Svehla , Vogel's Qualitative Inorganic Analysis, Addison Wesley,Longman Ltd, 7th Edition, (1996).
- Analytical chemistry: Qualitative analysis by F. P Treadwell, (2011).
- Vogel's Textbook of Macro and Semimicro Qualitative Inorganic Analysis (5<sup>th</sup> edition ) G. Svehla; Longman Inc., New York (1979).

## **3- Recommended Books**

- "Introduction to Semimicro Qualitative Analysis" Joseph T Lagowski, C. H. Sorum, (8th edition), Pearson (2004).
- "Analytical Chemistry," Gary D. Christian, Purnendu K. Dasgupta, Kevin A. Schug, 7th Edition, John Wiley and Sons Inc, Hoboken (2014).

## **4- Periodicals, Web Sites, etc**

- Analytical Letters Journal
- Analyst Journal
- Journal of pharmaceutical and biomedical analysis

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**Course Coordinator: Prof. Dr. Hisham Ezzat Abdel-Latif**

**Head of Department: Prof. Dr. Magda Elhenawee**

تم مناقشة و اعتماد توصيف المقرر من مجلس القسم بتاريخ

29-8-2018

Matrix I of Analytical Chemistry-2 course								
Course Contents		ILOs of the course						
		Knowledge and understanding			Practical skills		Intellectual skills	
		a1	a2	a3	b1	b2	c1	c2
Lectures								
1	- Carbonates and bicarbonates	×	×				×	×
2	- Sulfur containing anions	×	×				×	×
3	- Sulfur containing anions	×	×				×	×
4	- Halides	×	×				×	×
5	- Cyanogen anions	×	×				×	×
6	- Cyanogen anions	×	×				×	×
7	- Arsenic & phosphate containing anions	×	×				×	×
8	- Arsenic & phosphate containing anions	×	×				×	×
9	- Nitrogen containing anions	×	×				×	×
10	- Difficulties: Oxidizing agents	×		×			×	
11	- Difficulties: Phosphates	×		×			×	
12	- Difficulties: Insolubles	×		×			×	
13	- Difficulties: Organic matter	×		×			×	
Practical sessions								

<b>1</b>	Laboratory safety measures				x				
<b>2</b>	Carbonates and bicarbonates mixture				x	x			x
<b>3</b>	Separation of sulphate gp anions				x	x			x
<b>4</b>	Separation of sulphate gp anions				x	x			x
<b>5</b>	Separation of halide gp anions				x	x			x
<b>6</b>	Separation of halide gp anions				x	x			x
<b>7</b>	Separation of cyanogen gp anions				x	x			x
<b>8</b>	Separation of cyanogen gp anions				x	x			x
<b>9</b>	Separation of Arsenic & phosphate gp anions				x	x			x
<b>10</b>	Revision I				x	x	x		x
<b>11</b>	Revision II				x	x	x	x	x

## Matrix II of Analytical Chemistry-2 course

National Academic Reference Standards (NARS)	Program ILOs	Course ILOs	Course contents	Sources	Teaching and learning methods		Method of assessment		
					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.	A1	a1	- Carbonates &Bicarbonates - Sulfur Containing Anions - Halides Containing Anions - Cyanogen Containing Anions - Nitrogen Containing Anions - Arsenic & phosphate Containing Anions -Difficulties	Student book Essential books Recommended books Internet	x	x	x	x
			a2	- Carbonates &Bicarbonates - Sulfur Containing Anions - Halides Containing Anions - Cyanogen Containing Anions - Nitrogen Containing Anions - Arsenic & phosphate Containing Anions					
			a3	- Difficulties					

<b>2.3</b>	Principles of different analytical techniques using GLP guidelines and validation procedures.	A11	a2	- Carbonates & Bicarbonates - Sulfur Containing Anions - Halides Containing Anions - Cyanogen Containing Anions - Nitrogen Containing Anions - Arsenic & phosphate Containing Anions	Student book Essential books Recommended books Internet	×			×		×
<b>3.2</b>	Handle and dispose chemicals and pharmaceutical preparations safely	B2	b1	Laboratory safety measures	Practical notes		×		×	×	
<b>3.4</b>	Extract, isolate, synthesize, purify, identify, and/or standardize active substances from different origins.	B6	b2	-Separation and identification of anion groups and mixtures	Practical notes		×		×	×	
<b>4.3</b>	Apply qualitative and quantitative analytical and biological methods for QC and assay of raw materials as well as pharmaceutical preparations	C6	c1		Practical notes		×		×	×	
			c2		Student book Essential books Recommended books Internet	×	×	×	×	×	
					Practical notes		×		×	×	

5.10	Implement writing and thinking, problem-solving and decision-making abilities.	D11	d1		Practical notes			×		×	
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**Course Coordinator: Prof. Dr. Hisham Ezzat Abdel-Latif**  
**Head of Department: Prof. Dr. Magda Elhenawee**

تم مناقشة و اعتماد توصيف المقرر من مجلس القسم بتاريخ

29-8-2018

**COURSE  
SPECIFICATIONS**

**Pharmaceutical  
Organic  
Chemistry (2)**

**First year – second Term  
2018-2019**

## **Course specification of Pharmaceutical Organic Chemistry (POC 121)**

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**Institution:** Zagazig University

**Faculty:** Pharmacy

### **A- Course identification:**

- |  |
|--|
| <b>1. Program (s) on which the course is given:</b> Bachelor of Pharmacy   |
| <b>2. Major or Minor element of programs:</b> Major                        |
| <b>3. Department offering the course:</b> Pharmaceutical Organic Chemistry |
| <b>4. Academic year Level:</b> First Year/ First Semester                  |
| <b>5. Date of specification approval:</b> 28/8/2018                        |

### **B- Basic information:**

- |   |                      |
|---|----------------------|
| <b>1. Title:</b> Pharmaceutical Organic Chemistry             | <b>Code:</b> POC 121 |
| 2. Teaching Hours: 2 hours Theory and 2 hours Practical/ week | Total = 3 hours/week |

### **C- Professional information:**

#### **1- Overall aim of the course:**

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

- Identify aromatic and antiaromatic organic compounds.
- Describe the physical and chemical properties of aromatic organic compounds.
- Outline the chemical reactions of primary, secondary and tertiary amines.
- Outline the preparations and chemical reactions of aromatic diazonium salts.
- Describe the reactions of aromatic nucleophilic substitution reactions.
- Outline the reactions and stereochemistry of haloalkanes ( $S_N1$ ,  $S_N2$ , E1 and E2).

## **2- Intended Learning Outcomes (ILOs):**

<b>A- Knowledge and Understanding:</b>	
a1	Outline the principles of aromaticity and antiaromaticity.
a2	Illustrate the chemical reactions of benzene, aromatic sulphonic acids nitro compounds, amines and halo compounds.
<b>B- Professional and Practical skills:</b>	
b1	Handle basic laboratory equipments and organic raw materials of drugs effectively and safely.
b2	Identify qualitatively the main functional groups of organic raw materials of drugs and write laboratory reports including experimental procedures, observations and conclusions
<b>C- Intellectual skills:</b>	
c1	Manipulate function groups attached to aromatic rings.
c2	Classify organic compounds according to their chemical properties.
<b>D-General and Transferable skills:</b>	
d1	Communicate effectively with others and work as part of a team.
d2	Set realistic targets and manage time to meet targets within deadlines

## **D- Contents:**

<b>Week No.</b>	<b>Lecture contents (2 hrs lec.)</b>	<b>Practical session (2hrs/lab)</b>
1	Aromatic compounds: Criteria for aromaticity, Hückel rule, antiaromaticity, molecular orbital explanation of aromaticity and antiaromaticity, consequences of aromaticity on the reactivity of organic compounds	Laboratory safety measures
2	Nomenclature of benzene derivatives & electrophilic substitution reaction: Halogenation & sulphonation, desulphonation.	Identification of aromatic compounds (e.g benzene).
3	Electrophilic Substitution reactions continued: Nitration and Friedle-Craft alkylation and acylation).	Preparation of nitrobenzene
4	Arenes: Structure, nomenclature, preparation and chemical properties.	Identification of benzoic acid
5	Aromatic nitro compounds: Structure, nomenclature, preparation and chemical properties.	Preparation of m-Nitrobenzoic acid.
6	Aromatic sulphonic acids: Structure, nomenclature, preparation and chemical properties.	Identification of phenol; Preparation of 2,4,6-Trinitrophenol (Picric acid).
7	<b>Midterm exam</b>	
8	Amines (aromatic and aliphatic): Physical properties, preparation, chemical properties and reactions	Identification of aniline Preparation of monophenylurea
9	Aromatic diazonium salts: Nomenclature, preparation, stability and chemical properties.	Preparations and reactions of aromatic diazonium salts
10	Halo compounds (aliphatic and aromatic): Classification and nomenclature, preparation and physical properties.	Preparation of Tribromophenol.
11	Halocompounds: Aliphatic substitution reaction S <sub>N</sub> 1, S <sub>N</sub> 2, and their stereochemistry.	Identification of acetanilide; Preparation of p-bromoacetanilide
12	Halo compounds: Elimination reaction E <sub>1</sub> , E <sub>2</sub> , and their stereochemistry.	Identification aniline HCl & urea
13	Halocompounds: Aromatic Nucleophilic substitution reactions and Electrophilic substitution reactions	Practical exam
14	Criteria of aromatic and antiaromatic organic compounds	Practical exam
15	Final exam	

## **E- Teaching and Learning Methods:**

Lectures and practical sessions

## **F- Students Assessment Methods:**

1. Written exams to assess: a1, a2, c1, c2
2. Practical exams to assess: b1, b2, c1, c2, d1, d2
3. Oral exam to assess: a1, a2, c1, c2
4. Writing reports: b1, b2, c1, c2, d1, d2

## **Assessment schedule and weighting of each assessment**

	Assessment method	Week Due	Marks (percentage)
1	Midterm written exam	7	10 marks (10 %)
2	Final written exam	Week 15	50 marks (50%)
3	Practical exam	Week 13 & 14	20 marks (20%)
4	Writing reports	Each lab	5 marks (5%)
5	Oral exam	Week 15	15 marks (15%)

## **G- Facilities required for teaching and learning:**

- For lectures: Black and white boards and data show
- For practical labs: Well-equipped labs

## **H- List of References:**

**1- Course Notes:** Student book of Pharmaceutical Organic chemistry approved by the department 2018.

### **2- Essential Books:**

- i- Organic Chemistry vol.1- The Fundamental principles; Finar L.; Long man Group (2002).
- ii- Organic Chemistry (eighth edition); Solomons T.W.G. & Fryhle C.B.; John Wiley and Sons Inc., USA (2004).

### **3- Recommended Books:**

- i- Organic Chemistry (sixth edition); Morrison R.T. and Boyd R.N.; Allyn and Bacon, Prentice-Hall Inc, USA (1992).
- ii- Organic Chemistry; McMurry; J. Brooks; Cole publishing company (2000).

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**Course Coordinator: Prof. Dr. Zakaria Abdelsamii**

**Head of Department: Prof. Dr. Hanan Abdelrazik Abdelfatah**

**تم مناقشة و اعتماد توصيف المقرر من مجلس القسم بتاريخ 28 / 8 / 2018م**



Matrix I of pharmaceutical organic chemistry 2 course									
Course Contents		ILOs of pharmaceutical organic chemistry 2 course							
		Knowledge and understanding	Professional and practical skills		Intellectual skills		General and transferable skills		
Lectures		a1	a2	b1	b2	c1	c2	d1	d2
1	Benzene structure and aromaticity	x							
2	Electrophilic substitution reactions	x							
4	Aromatic halocompounds: preparations and electrophilic substitution reactions	x	x				x		
5	Aromatic halocompounds: aromatic nucleophilic substitution reactions	x							
6	Aliphatic halocompounds: substitution reactions	x							
7	Aromatic nitro compounds: nomenclature and preparation	x	x				x		
8	aromatic nitro compounds: physical and chemical properties	x							
9	Amines (aliphatic and aromatic)	x	x				x		
10	Aromatic diazonium salts	x	x				x		
11	Aromatic sulphonic acids	x	x				x		
12	Arenes: nomenclature, preparations.	x	x				x		
13	Arenes:chemical reactions	x							

<b>Practical sessions</b>								
<b>1</b>	Laboratory safety measures			X				X
<b>2</b>	Introduction the concept of identification of organic compounds			X	X			X
<b>3</b>	General scheme for identification of aliphatic and aromatic carboxylic acids/salts			X	X	X	X	X
<b>4</b>	Activities							X

## Matrix II of pharmaceutical organic chemistry 2 course

National Academic Reference Standards (NARS)	Program ILOs	Course ILOs	Course contents	Sources	Teaching and learning methods			Method of assessment		
					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.	A1	a1	Benzene structure and aromaticity Electrophilic substitution reactions	Student book Essential books	x x			x x		x x
			Fluoranes	Student book Essential books Recommended books Internet	x		x	x		x
			Aromatic halocompounds: preparations and electrophilic substitution reactions	Student book Essential books	x			x		x
			Aromatic halocompounds: aromatic nucleophilic substitution reactions		x			x		x
			Aliphatic halocompounds: substitution		x			x		x

2.5 Principles of drug design, development and synthesis.	A15	a2	reactions					
			Aromatic nitro compounds: nomenclature and preparation	x			x	x
			aromatic nitro compounds: physical and chemical properties	x			x	x
			Amines (aliphatic and aromatic)	x			x	x
			Aromatic diazonium salts	x			x	x
			Aromatic sulphonic acids	x			x	x
			Arenes: nomenclature, preparations.	Student book Essential books Recommended books Internet	x	x	x	x
			Arenes:chemical reactions	Student book Essential books	x		x	x
			Aromatic halocompounds: preparations and electrophilic substitution reactions	Student book Essential books	x		x	x
			Aromatic nitro compounds: nomenclature and preparation	x			x	x
			Amines	x			x	x

				(aliphatic and aromatic)						
				Aromatic diazonium salts	x			x		x
				Aromatic sulphonic acids	x			x		x
				Arenes: nomenclature, preparations.	x			x		x
3.2	Handle and dispose chemicals and pharmaceutical preparations safely	B2	b1	Laboratory safety measures		x			x	
				Introduction the concept of identification of organic compounds		x			x	
				Scheme for identification of organic compounds		x			x	
3.4	Synthesize, purify, identify, and/or standardize active substances from different origins.	B7	b2	Identification of organic compounds		x			x	
				Scheme for identification of aliphatic and aromatic compounds		x			x	
4.5	Select the appropriate methods of isolation, synthesis, purification, identification, and standardization of active		c1	Scheme for identification of aliphatic and aromatic compounds	Practical notes		x		x	
			c2	Aromatic halocompounds: preparations and electrophilic substitution	Student book Essential books	x			x	x

	substances from different origins.			reactions								
				Aromatic nitro compounds: nomenclature and preparation		X				X		X
				Amines (aliphatic and aromatic)		X				X		X
				Aromatic diazonium salts		X				X		X
				Aromatic sulphonic acids		X				X		X
				Arenes: nomenclature, preparations.	Student book Essential books Recommended books Internet	X		X	X			X
<b>5.1</b>	Communicate clearly by verbal and non-verbal means	D1	d1	Laboratory safety measures	Practical notes		X			x		
<b>5.3.</b>	Work effectively in a team	D3		Identification of organic compounds			X			x		
				Scheme for identification of organic compounds	Practical notes		X			x		
<b>5.8</b>	Demonstrate creativity and time management abilities	D9	d2	General scheme for identification of aliphatic and aromatic carboxylic acids/salts	Practical notes Recommended books Internet		X			x		
				Activities			X	x		x		

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**Course Coordinators:** Prof. Dr. Zakaria Abdelsamii

**Head of Department:** Prof. Dr. Hanan Abdelrazik Abdelfatah

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

**COURSE  
SPECIFICATIONS**

**Pharmacognosy 1**

**First year – second Term  
2018-2019**

# **Course Specification of Pharmacognosy 1**

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**University:** Zagazig                   **Faculty:** Pharmacy

## **A- Course specifications:**

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

Major or Minor element of programs: Major

Department offering the program: -----

Department offering the course: Pharmacognosy

Academic year/ Level: First year/Second term

Date of specification approval: 25 September 2018

## **B- Basic information:**

Title: Pharmacognosy 1                   Code: PG121

Credit Hours: ---

Lectures: 3 hrs/week

Practical: 2 hrs/week

Tutorials: ---

Total: 4 hrs/week

## **C- Professional information:**

### **1. Overall Aims of the Course:**

On completion of the course, students will be able to illustrate microscopical and macroscopical characters and uses of medicinal leaves, flowers, barks, woods and seeds as well as identification of their different active constituents and adulteration.

## **2. Intended Learning Outcomes of Pharmacognosy 1:**

<b>A- Knowledge and Understanding</b>	
<b>a1</b>	Describe morphological and histological characters of medicinal Leaves, flowers, barks, woods and seeds.
<b>a2</b>	Outline adulteration of different medicinal Leaves, flowers, barks, woods and seeds.
<b>a3</b>	Identify different active constituents of medicinal uses of Leaves, flowers, barks, woods and seeds.
<b>B- Professional and Practical Skills</b>	
<b>b1</b>	Handle and dispose chemicals in a safe way.
<b>b2</b>	Use equipments effectively.
<b>b3</b>	Examine drugs of plant origin in entire and powdered form.
<b>b4</b>	Determine the active constituents of the studied drugs.
<b>C- Intellectual Skills</b>	
<b>c1</b>	Adopt GLP and safety guidelines in the lab.
<b>c2</b>	Differentiate between drugs in entire and powdered form.
<b>c3</b>	Investigate active constituents of different drugs.
<b>D- General and Transferable Skills</b>	
<b>d1</b>	Work as a member of a team.
<b>d2</b>	Develop internet search and communications skills.
<b>d3</b>	Manage time and plan of work.
<b>d4</b>	Write and present reports.

## D-Course contents:

Week No	Lecture (3 hrs/week)	Practical session (2 hrs/week)
1	Overview on the course in pharmacognosy I and Introduction to medicinal leaves.	Laboratory safety measures. Examination of plant leaves and T.S. of leaves.
2	Study of the general solanaceous leaves characters. Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of leaves containing alkaloids and glycosides.	Macroscopical and microscopical examination of Hyoscamous and Datura leaves.
3	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of leaves containing cardiac glycosides and miscellaneous leaves.	Microscopical examination of powdered Senna and Digitalis leaves. Activity (report on pharmaceutical leaves)
4	Introduction to medicinal flowers.	Identification of Clove, Chamomile and Santonica in entire and powdered form.
5	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of clove, German and Roman chamomile.	Identification of Calendula, Lavander, Karkadeh and Tilia in powdered form.
6	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Pyrethrum and Santonica. Unofficial flowers.	Identification of Cinchona and Cinnamon in entire and powdered form.
7	Midterm	
8	Introduction to medicinal barks.	Identification of Cassia in entire and powdered form.
9	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Cinnamon, Cassia, Cascarilla, Canella and Quillaia.	Identification of Quassia wood in entire and powdered form.
8	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Pomegranate, Cinchona, Cascara and Frangula.	Identification of Galls in powdered form. Activity (report on pharmaceutical bark )
9	Introduction to medicinal Wood. Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Quassia wood and Galls	Identification of Linseed and Black mustard in entire and powdered form.

<b>10</b>	Introduction to medicinal seeds. Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Linseed, Cardamom and Nutmeg.	Identification of Fenugreek in entire and powdered form. Identification of Cardamom and Nux vomica in powdered form.
<b>11</b>	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Foenugreek, Colchicum and Nux vomica.	Revision
<b>12</b>	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Strophanthus and Mustard.	Practical exam
<b>13</b>	Study other medicinally importance seeds (unofficial seeds).	Practical exam
<b>14</b>	Revision	
<b>15</b>	Written and oral exam	

## E- Teaching and Learning Methods:

- Lectures (interactive lecture, data show and board)
- Practical sessions
- Self-learning (collect different marketed herbal products &demonstrate the structure , active constituents and uses of the herb in the form of report )
- Field visit

## F- Student Assessment Methods

- Written exam to assess a1, a2, a3, c1, c2,c3
- 2- Practical exam to assess b1, b2, b3,b4
- 3- Oral exam to assess a1, a2, a3, c1, c2,c3
- 4- Activities (group discussion, presentation, net search and pamphlets' of natural drugs) to assess d1, d2, d3,d4

### **Assessment schedule:**

<b>Assessment (1):</b> Written exams	Week 15
<b>Assessment (2):</b> Activity	Week 3, 8
<b>Assessment (3):</b> Practical exams	Week 12, 13
<b>Assessment (4):</b> Oral exams	Week 15
<b>Assessment (5):</b> midterm	Week 7

### **Weighting of Assessment:**

<b>Assessment method</b>	<b>Marks</b>	<b>Percentage</b>
<b>Written exams</b>	75	50%
<b>Mid term</b>	15	10%
<b>Activity</b>	10	7%
<b>Practical exam</b>	30	20%
<b>Oral exam</b>	20	13%
<b>TOTAL</b>	150	100%

### **G- Facilities Required for Teaching and Learning:**

- For lectures: Black (white) boards, data show.
- For Labs: Chemicals, glassware, water bathes.
- Zagazig University Farm

### **H- List of References:**

**1- Student's book** approved by Pharmacognosy Department on 2018.

#### **2- Essential Books:**

- pharmacognosy , fundamentals,applications and strategies by simone Badal and Rupika Delgoda (2018)

-Trease and Evans, Pharmacognosy, 15<sup>th</sup>ed., Saunders company, Nottingham,U.K. Willium Charles Evans (2003).

#### **3- Recommended Books**

Leung A.Y. and Faster" Encyclopedia of Common Natural Ingredients Used in Food,

Drugs and Cosmetics".

- Janice, Glimn-Lacy and Peter B. Kaufman, Botany Illustrated, Introduction to plants, major groups, flowering plants families, 2nd ed. Springer **2006**.
- Martindale, "The extrapharmacopeia". 31<sup>st</sup> Edn., by James, E.F Reynolds. And Kathleen Parfitt, Royal Pharmaceutical Society, London (2007).

#### **4- Periodicals, web sites, etc**

Amer. J. Nat. Prod., Phytochemistry, Planta Medica , Fitoterapia.

- A. Fahan, Plant Anatomy, Pergamon Press. **2002**.
  - <http://www.scribd.com/doc/75980088/Atlas-of-Medicinal-Plants-II>
  - <http://pharmacystudent-prep.blogspot.com>
  - <http://www.pharma-board.com/board/fopgal/index.php>
- 

**Course Coordinators:** Prof. Dr. Afaf abd El-Ghany

**Head of department:**

**Date:** تم مناقشة و إعتماد توصيف المقرر من مجلس القسم بتاريخ / 9/2018

## Matrix I of Pharmacognosy-1 Course

Course Contents			ILOs of Pharmacognosy-1													
			Knowledge and understanding			Professional and practical skills				Intellectual skills			Transferable and general skills			
			a1	a2	a3	b1	b2	b3	b4	c1	c2	c3	d1	d2	d3	d4
<b>Lectures</b>																
1	Overview on the course in pharmacognosy 1 and Introduction to medicinal leaves.	x														
2	Study of the general solanaceous leaves characters. Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of leaves containing alkaloids	x	x	x							x					
3	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of leaves containing glycosides and miscellaneous leaves.	x	x	x							x					
4	Introduction to medicinal flowers. Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of clove,	x														
5	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of, German and Roman chamomile, and Pyrethrum.	x	x	x\							x					

6	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Santonica. Unofficial flowers.	x	x	x					x		
7	Introduction to medicinal barks. Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Cinnamon, Cassia, Cascarilla, Canella and Quillaia.	x									
8	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Pomegranate, Cinchona, Cascara and Frangula.	x	x	x					x		
9	Introduction to medicinal Wood. Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Quassia wood and Galls	x	x	x					x		
10	Introduction to medicinal seeds. Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Linseed, Cardamom and Nutmeg.	x	x	x							
11	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Foenugreek, Colchicum and Nux vomica.	x	x	x					x	x	
12	Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Strophanthus and Mustard. Study other medicinally importance seeds (unofficial seeds).	x	x	x					x		
<b>Practical sessions</b>											

17	Laboratory safety measures. Dealing with microscope. - Examination of plant leaves and T.S. of leaves.				x	x				x		
18	Macroscopical and microscopical examination of Hyoscamous and Datura leaves.					x	x					
19	Microscopical examination of powdered Senna and Digitalis leaves. <b>Activity (report on pharmaceutical leaves )</b>					x	x			x		x
20	Identification of Clove in entire and powdered form.					x	x					
21	Identification of Clove, Chamomile and Santonica in entire and powdered form.					x	X					
22	Identification of Calendula, Lavander, Karkadeh and Tilia in powdered form.					x	x					
23	Identification of Cinchona, Cinnamon in entire and powdered form.					x						
24	Identification of Cassia in entire and powdered form.					x						
25	Identification of Quassia wood in entire and powdered form.					x						
26	Identification of Galls in powdered form. Activity (Presentation, (report on pharmaceutical bark ))					x	x			x		x
27	Identification of Linseed and Black mustard in entire and powdered form.					x	x					
28	Identification of Fenugreek in entire and powdered form. Identification of Cardamom and Nux vomica in powdered form.					x						
29	Revision				x	x			x	x	x	

## Matrix II of Pharmacognosy-1 Course

National Academic Reference Standards NARS	Program ILOs	Course ILOs	Course contents	Sources	Teaching and learning methods			Weighting of assessment		
					Lecture	Practical session	Self learning	Written exam	Practical exam	Oral exam
<b>Lectures</b>										
2.1	Principles of basic, pharmaceutical, medical, social, behavioral, management, health and environmental sciences as well as pharmacy practice.	A2	a1	<ul style="list-style-type: none"> <li>- Overview of pharmacognosy I.</li> <li>- Introduction to medicinal leaves, flowers.</li> <li>- Study morphological and histological characters of flowers, barks, woods and seeds in entire and powdered form</li> <li>Study of the general solanaceous leaves characters. Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form</li> </ul>	Student's book	×			×	×

			<p>of leaves containing alkaloids</p> <p>Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of leaves containing glycosides and miscellaneous leaves.</p> <p>Introduction to medicinal flowers.</p> <p>Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of clove,</p> <p>Introduction to medicinal barks.</p> <p>Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Cinnamon, Cassia, Cascarella, Canella and Quillaia.</p>					
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			a2	Outline adulteration of different plant organs using microscope and chemical tests. Study morphological and histological characters, constituents, uses, chemical tests and detection of adulteration in entire and powdered form of Santonica. Unofficial flowers.	Student's book	×			×		×
2.4	Principles of isolation, synthesis, purification, identification, and standardization methods of pharmaceutical compounds.	A12	a3	- Identify different active constituents and medicinal uses of Leaves, flowers, barks, wood and seeds.	Student's book	×			×		×
4.5	Select the appropriate methods of isolation, synthesis, purification, identification, and standardization of active substances from different origins.	C9	c2	- Differentiate between drugs obtained from different medicinal leaves, flowers, barks, wood and seeds in entire and powdered form.	Student's book	×			×		×
			c3	- Study the active constituents of medicinal flowers, barks, wood and seeds.	Student's book	×			×		×
<b>Practical sessions</b>											
3.2	Handle and dispose chemicals and pharmaceutical preparations safely	B2	b1	- Laboratory safety measures. Dealing with microscope	Practical notes					×	
			b2	Examination of plant leaves and T.S. of leaves.	Practical notes					×	

3.4	Extract, isolate, synthesize, purify, identify, and/or standardize active substances from different origins.	B6	b3	<p>Identification of Clove in entire and powdered form.</p> <p>Identification of Clove, Chamomile and Santonica in entire and powdered form.</p> <p>Identification of Calendula, Lavander, Karkadeh and Tilia in powdered form.</p> <p>Identification of Cinchona, Cinnamon in entire and powdered form.</p> <p>Identification of Cassia in entire and powdered form.</p> <p>Identification of Quassia wood in entire and powdered form.</p> <p>Identification of Galls in powdered form.</p> <p>Activity (Presentation, (pamphlet containing A.C))</p> <p>Identification of Linseed and Black mustard in entire and powdered form.</p> <p>Identification of Fenugreek in entire and powdered form.</p> <p>Identification of Cardamom and Nux vomica in powdered form.</p>	Practical notes					x	
			b4	<ul style="list-style-type: none"> <li>- Identification of different secondary metabolites using chemical tests.</li> </ul>	Practical notes					x	
4.2	Comprehend and apply GLP,GPMP, GSP and GCP guidelines in pharmacy practice	C3	c1	<ul style="list-style-type: none"> <li>- Safety measures lab.</li> </ul>	Practical notes					x	

5.3	Work effectively in a team	D3	d1	- Activity (report on pharmaceutical leaves ,bark ,seeds)	Internet, essential and recommended books.			x			
5.4	Use numeracy, calculation and statistical methods as well as information technology tools	D5	d2	- Activity ( pharmaceutical preparation containing herbal constituents)	Internet, essential and recommended books.			x			
5.8	Demonstrate creativity and time management abilities	D9	d3	- Activity ( Presentation)	Internet, essential and recommended books.			x			
5.9	Implement writing and presentation skills	D10	d4	- Activity	Internet, essential and recommended books.			x			

**Course Coordinators:** Prof. Dr. Afaf abd El-Ghany

**Head of department:**

**Date:** تم مناقشة و إعتماد توصيف المقرر من مجلس القسم بتاريخ 9/2018

**COURSE  
SPECIFICATIONS**

**Pharmaceutics-2**

**First year – second Term  
2018-2019**

## **Course specification of pharmaceutics-2**

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**University:** Zagazig

**Faculty:** Pharmacy

### **A- Course specifications:**

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

Major or Minor element of programs: Major

Department offering the program: -----

Department offering the course: Pharmaceutics Dept.

Academic year Level: First year/Second semester

Date of specification approval: November 2018

### **B- Basic information:**

Title: Pharmaceutics-2

Code: **PC121**

Credit Hours: ---

Lectures: 2 hrs/week

Practical: 2 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 describe; Types of flow, Determination of viscosity, The rheology of pharmaceutical dosage forms, Buffer and isotonic solution, Intermolecular forces, Liquid-solid ,liquid-gas and liquid-liquid interfaces, Surfactants, Structure of micelles and liquid crystals, Liquid-solid interface, Adsorption, Metal complexes, Organic molecular complexes, Occlusion compound, Complexation and drug action, Method of analysis, State of matter, Kinetic molecular theory and Phase equilibrium as well as Solubility of solid in liquid.

## **2-Intended Learning Outcomes of pharmaceutics-2 (ILOs):**

<b>A- Knowledge and Understanding</b>	
a1	Outline types of flow, viscosity, rheology, surfactants, complexation and adsorption
a2	Define buffer, isotonicity, adsorption, kinetic molecular theory, solubility and mention the colligative properties of solution
a3	Outline intermolecular forces and states of matter
a4	Illustrate liquid-solid, liquid-gas and liquid-liquid interfaces
a5	Summarize the structure of micelles and liquid crystals
<b>B- Professional and Practical Skills</b>	
b1	Perform experiments for measurement of liquids viscosity , surface tension and CMC, adsorption and solubility of certain substances such as benzoic acid and salicylic acid
<b>C- Intellectual Skills</b>	
c1	Select the appropriate pharmaceutical ingredients based on their physicochemical properties for safe and effective formulation
c2	Interpret different results from physical measurements
<b>D- General and Transferable Skills</b>	
d1	Work effectively in a team
d2	Develop the decision making and problem solving abilities
d3	Communicate effectively in oral and written manner

## D- Contents:

<b>Week No.</b>	<b>Lecture contents (2hrs/week)</b>	<b>Practical session (2hrs/week)</b>
<b>1</b>	State of matter and intermolecular forces: -Types of inter and intra molecular forces	Introduction
<b>2</b>	State of matter: Gaseous state, Liquid state and solid state	Pharmaceutical calculation
<b>3</b>	Phase equilibrium and Phase rule	Pharmaceutical calculation
<b>4</b>	Rheological flow characteristics of liquids and semi-solids	Determination of viscosity of certain liquids
<b>5</b>	The rheology of pharmaceutical dosage forms	Determination of viscosity of certain liquids
<b>6</b>	Surface and Interfacial phenomenon	Determination of surface tension of liquids
<b>7</b>	<b>Midterm exam</b>	
<b>8</b>	Surface characteristics and surface active agents	Determination of surface tension of liquids
<b>9</b>	Adsorption	Determination of percentage of adsorbed substances
<b>10</b>	Solubility of solid in liquid Properties of solutions	Determination of solubility of certain substances
<b>11</b>	Buffer solutions	Solve problems of pharmaceutical buffer solutions
<b>12</b>	Isotonic solutions	Solve problems of isotonic solutions
<b>13</b>	Complexation and protein binding: Metal complexes Organic molecular complexes	Practical Exam
<b>14</b>	inclusion compounds Complexation and drug action Method of analysis	
<b>15</b>	final written exam	

## **E- Teaching and Learning Methods:**

- Lectures
- Practical session
- Activity

## **F- Student Assessment methods:**

1-Written exams to assess: a1, a2, a3, a4, a5, c1, c2, d2, d3

2- Practical exams to assess: b1, d2

3- Activity within labs: d1, d2, d3

3- Oral exam to assess: a1, a2, a3, a4, a5, c1, c2, d3

## **Assessment schedule**

<b>Assessment (1):</b> Written midterm exam	Week 7
<b>Assessment (2):</b> Practical exams	Week 13
<b>Assessment (3):</b> Activity within labs	each lab
<b>Assessment (4):</b> Written final exam	Week 15
<b>Assessment (5):</b> Oral exams	Week 15

## **Weighting of Assessment**

<b>Assessment method</b>	<b>Marks</b>	<b>Percentage</b>
<b>Written midterm exam</b>	10	10%
<b>activities</b>	5	5%
<b>Practical exam</b>	20	20%
<b>Written final exam</b>	50	50%
<b>Oral exam</b>	15	15%
<b>TOTAL</b>	100	100%

## **G- Facilities required for teaching and learning:**

For lectures : Black ( white ) boards, data show

For labs: Chemicals, glass ware, instruments, digital balance, water bathes

## **H- List of References:**

**1- Course Notes:** Student book of pharmaceutics-2 approved by

pharmaceutics department 2018

**2- Essential Books:**

- i- Physical pharmacy, Martin, A., 4<sup>th</sup> edition, Philadelphia, London. (1993).
- ii- Pharmaceutical calculations, Stoklosa, M., and Ansel, H. C., Philadelphia, London. (1997).
- iii- Martin's physical pharmacy and pharmaceutical sciences: Patrick J. Sinko, Alfred N. Martin, Lippincott Williams & Wilkins, (2006).

**3- Recommended Books**

- i- The science of dosage form design, Aulton, M. E., 2nd edition, Churchill Livingstone, London. (2002).
  - ii- Applied physical pharmacy, Mansoor M. Amiji, Beverly J. Sandmann, McGraw-Hill,(2003).
  - ✓ 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 pharmaceutics 2 course												
Course Contents		ILOs of pharmaceutics 2 course										
		Knowledge and understanding					Professional and practical skills		Intellectual skills		Transferable and general skills	
Lectures		a1	a2	a3	a4	a5	b1	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		x								
3	Phase equilibrium and Phase rule	x										
4	Rheological flow characteristics of liquids and semi-solids :	x						x	x			
5	The rheology of pharmaceutical dosage forms	x						x	x			
6	Surface and Interfacial phenomenon	x			x	x						
7	Surface characteristics and surface active agents	x				x	x					
8	Adsorption	x	x		x				x			

9	Solubility of solid in liquid	x	x						x		
10	Properties of solutions	x	x						x		
11	Buffer solutions	x	x							x	
12	Isotonic solutions	x	x							x	
13	Complexation and protein binding: Metal complexes Organic molecular complexes	x			x						
14	inclusion compounds Complexation and drug action Method of analysis	x	x								
<b>Practical Session</b>											
15	Determination of viscosity of certain liquids					x		x	x	x	x

<b>16</b>	Determination of surface tension of liquids					x			x	x	x	x
<b>17</b>	Determination of percentage of adsorbed substances					x			x	x		x
<b>18</b>	Determination of solubility of certain substances					x		x	x	x		x
<b>19</b>	Solve problems of pharmaceutical buffer solutions									x	x	x
<b>20</b>	Solve problems of isotonic solutions									x	x	x

Matrix II of Pharmaceutics 2 course									
NARS	Program ILOS	Course ILOS	Course content	Sources	Teaching and learning methods		Method of assessment		
					Lecture	Practical session	Written exam	Practical exam	Oral exam
<b>2.1 Principles of basic, pharmaceutical, medical, social, behavioral, management, health and environmental sciences as well as pharmacy practice.</b>  <b>2.2 Physical-chemical properties of various substances used in preparation of medicines including inactive and active ingredients as well as</b>	A2  A9	a1	State of matter and intermolecular forces: -Types of inter and intra molecular forces	Student book Essential books	x	x		x	
			State of matter: -Gaseous state, Liquid state and solid state						
			Phase equilibrium and Phase rule						
			Rheological flow characteristics of liquids and semi-solids						
			The rheology of pharmaceutical dosage forms						
			Surface and Interfacial phenomenon						
			Surface characteristics						

**biotechnology  
and radio-  
labeledproducts**

		and surface active agents Adsorption Solubility of solid in liquid Properties of solutions Buffer solutions Isotonic solutions Complexation and protein binding: Metal complexes Organic molecular complexes				
	a2	Adsorption Solubility of solid in liquid Properties of solutions Buffer solutions Isotonic solutions inclusion compounds Complexation and drug action	Student book Essential books	x	x	x

		Method of analysis						
a3		State of matter and intermolecular forces: -Types of inter and intra molecular forces	Student book Essential books	x		x		x
		State of matter: -Gaseous state, Liquid state and solid state						
a4		Surface and Interfacial phenomenon	Student book Essential books	x		x		x
		Adsorption						
a5		Surface and Interfacial phenomenon	Student book Essential books					
		Surface characteristics and surface active agents		x		x		x
		Complexation and protein binding: Metal complexes Organic						

			molecular complexes						
<b>3.4 Extract, isolate, synthesize, purify, identify, and /or standardize active substances from different origins.</b>	B6	b1	Determination of viscosity of certain liquids	Practical notes		x		x	
			Determination of surface tension of liquids	Practical notes		x		x	
			Determination of percentage of adsorbed substances			x			
			Determination of solubility of certain substances	Practical notes		x		x	
			Determination of surface tension of liquids	Practical notes		x		x	
	C1	c1	Rheological flow characteristics of liquids and semi-solids :	Student book Essential books Internet					
			The rheology of pharmaceutical dosage forms		x		x		x
			Surface characteristics and surface active agents						
<b>4.1 Apply pharmaceutical knowledge in the formulation of safe and effective medicines as well as in dealing with new drug delivery systems.</b>	C18	c2	Phase equilibrium and	Student book	x	x	x	x	x
<b>4.13 Analyze and interpret</b>									

<p><b>experimental results as well as published literature.</b></p> <p><b>5.1 Communicate clearly by verbal and means.</b></p> <p><b>5.3 Work effectively in a team.</b></p>			Phase rule	Essential books Internet Practical notes				
			Rheological flow characteristics of liquids and semi-solids					
			The rheology of pharmaceutical dosage forms					
			Adsorption					
			Solubility of solid in liquid					
			Properties of solutions					
			Buffer solutions					
			Isotonic solutions					
	D1	d3	Determination of viscosity of certain liquids	Practical notes				x
	Determination of surface tension of liquids							
	d1	Determination of percentage of adsorbed substances	x			x		
		Determination of solubility of certain substances						

<b>5.10 Implement writing and thinking, problem-solving and decision-making abilities.</b>	D11	d2	Solve problems of pharmaceutical buffer solutions  Solve problems of isotonic solutions					
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**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

# **COURSE SPECIFICATIONS**

**Mathematics and  
Statistics**

**First year – second Term  
2018-2019**

## توصيف مقرر الرياضيات و الاحصاء

كلية الصيدلة

جامعة الزقازيق

### أ- مواصفات المقرر:

البرنامج الذي يقدم المقرر: بكالوريوس الصيدلة  
المقرر يمثل عنصرا رئيسيا أو ثانويا بالنسبة للبرامج: ثانوياً  
القسم العلمي المسؤول عن البرنامج: -----  
القسم العلمي المسؤول عن تدريس المقرر: كلية العلوم- قسم الرياضيات  
السنة الدراسية: الفرقة الأولى – التيرم الثاني.

تاريخ اعتماد التوصيف: سبتمبر 2018

### (ب) البيانات الأساسية:

العنوان : رياضيات و احصاء  
الكود : MS120  
الساعات المعتمدة : ---  
المحاضرات : ساعة أسبوعيا  
العملي: ---  
الدروس العملية : ---  
المجموع : 1ساعة في الأسبوع

### (ج) البيانات المهنية:

#### 1) الأهداف العامة للمقرر:

عند إتمام المقرر سوف يكون الطلاب قادرين على تطبيق علم الرياضيات والاحصاء في  
مجال الصيدلة.

**2) النتائج التعليمية المستهدفة لمقرر الرياضيات و الاحصاء:**

<b>أ- المعرفة و الفهم</b>	
يلم بمبادئ علم الرياضيات.	1أ
يلم بمبادئ علم الإحصاء.	2أ
يحدد الطرق المختلفة للتحليل الإحصائي.	3أ
<b>ج- المهارات الفكرية</b>	
ج 1 يستخدم الطرق الإحصائية المختلفة لتقسيم نتائج الأبحاث المعملية.	
<b>د- مهارات عامة و تواصلية</b>	
يجيد التعامل مع الأرقام و الطرق الإحصائية.	1د
يكسب مهارات حل المشكلات و اتخاذ القرارات.	2د

**د- المحتويات:**

المحاضرة (1ساعة/الأسبوع)	رقم الأسبوع
- المقدمة - نظرية ذي الحدين	<b>1</b>
- الكسور الجزئية	<b>2</b>
- توفيق المنحنيات	<b>3</b>
- المصفوفات و المحددات	<b>4</b>
- جبر المصفوفات و المحددات	<b>5</b>
- حل المعادلات الخطية باستخدام المصفوفات أو المحددات	<b>6</b>
امتحان النصف فصلى	<b>7</b>
- النهايات و حساب التفاضل - بعض التطبيقات في حساب التفاضل: المعادلات الزمنية	<b>8</b>
- معادلة المماس و العمودي	<b>9</b>
- النهايات العظمى و الصغرى للدوال	<b>10</b>
- رسم المنحني	<b>11</b>
- مقدمة في الاحتمالات و الإحصاء: - حساب المتوسط الحسابي	<b>12</b>
- الانحراف القياسي	<b>13</b>
- التباين بعض التطبيقات الرياضية في مجال الصيدلة	<b>14</b>

**هـ أساليب التعليم و التعلم:**

- المحاضرة
- التعلم الذاتي

**وـ-أساليب تقييم الطلبة:**

1- الامتحان التحريري يقيم: أ1 و أ2 و أ3 و ج1 و د1 و د2

**الجدول الزمني التقييم:**

تقييم (1): الامتحان نصف الفصل	الاسبوع السابع
تقييم (2): الامتحان التحريري	الاسبوع الخامس عشر

**ترجح التقييم:**

النسبة المئوية	الدرجات	طريقة التقييم
%20	10	الامتحان نصف الفصل
%80	40	الامتحان التحريري
%100	50	الإجمالي

**زـ التسهيلات اللازمة للتعليم و التعلم:**

1- للمحاضرات: اللوحات (البيضاء) و السوداء.

**يـ قائمة المراجع:**

1- مذاكرة المقرر: كتاب الطالب الرياضيات العامة والاحصاء (2018)

**2- الكتب الدراسية**

الرياضيات العامة والاحصاء

**3- كتب مقتربة**

التفاضل والتكامل سلسلة شوم والاحصاء الرياضي

**منسق المقرر: أ.د / ياسر عبد العزيز عامر**

**التاريخ: 2018/9/**





مصفوفة (1) مقرر الرياضيات و الاحصاء						
النتائج التعليمية المستهدفة لمادة الرياضيات				محتويات المقرر		
مهارات عامة و تواصلية		المهارات الفكرية	المعرفة و الفهم			
2د	1د	ج1	3أ	2أ	1أ	
				X	المقدمة- نظرية ذات الحدين	1
X	X			X	الكسور الجزئية	2
X	X			X	توفيق المنحنيات	3
X	X			X	المصفوفات و المحددات	4
X	X			X	جبر المصفوفات و المحددات	5
X	X			X	حل المعادلات الخطية باستخدام المصفوفات أو المحددات	6
X	X			X	النهايات و حساب التفاضل	7
X	X			X	بعض التطبيقات في حساب التفاضل: المعادلات الزمنية	8
X	X			X	معادلة المماس و العمودي	9
X	X			X	النهايات العظمى و الصغرى للدوال	10
X	X			X	رسم المنحنى	11
X	X		X	X	مقدمة في الاحتمالات و الإحصاء: حساب المتوسط الحسابي	12
X	X		X		الانحراف القياسي	13
X	X		X		التبابن- اختبار ت- اختبار ف	14
		X			بعض التطبيقات الرياضية في مجال الصيدلة	15

مصفوفة (2) مقرر الرياضيات و الاحصاء								
أسلوب التقييم	أساليب التعليم و التعلم			المصدر	محتويات المقرر	نتائج التعلم المنشودة للمقرر	نتائج التعلم المنشودة للبرنامج	المعايير الأكاديمية المرجعية القومية (NARS)
الامتحان التحريري	التعلم الذاتي	الدروس العملية	المحاضرة					
X			X	كتاب الطالب	المقدمة- نظرية ذي الدين	1أ		2-1 الأساسية و مباديء العلوم و الطبية و الاجتماعية و الصيدلانية و الصحة و السلوكية الإدارية فضلا عن ممارسة العلوم البنائية الصيدلة
X			X	كتاب الطالب	مقدمة في الاحتمالات و الإحصاء: حساب المتوسط الحسابي	2أ	1أ	
X			X	كتاب الطالب	مقدمة في الاحتمالات و الإحصاء: حساب المتوسط الحسابي			2-17 طرق التحليل الاحصائية و الحسابات الدوائية
X			X	كتاب الطالب	الانحراف القياسي	3أ	35أ	
X			X	كتاب الطالب	البيان- اختبار ت- اختبار F			4-14 تحليل و تفسير النتائج التجريبية و كذلك الأبحاث المنشورة
X	X		X	كتاب الطالب و الكتب المقرحة والانترنت	بعض التطبيقات الرياضية في مجال الصيدلة	1ج	19ج	

	X	X	X	كتاب الطالب و كتب مقرحة و الانترنت	الكسور الجزئية توفيق المنحنيات المصفوفات و المحددات جبر المصفوفات و المحددات حل المعادلات الخطية باستخدام المصفوفات أو المحددات النهايات و حساب التفاضل بعض التطبيقات في حساب التفاضل: المعدلات الزمانية معادلة المماس و العمودي النهايات العظمى و الصغرى للدوال رسم المنحني مقدمة في الاحتمالات و الإحصاء: حساب المتوسط الحسابي الانحراف القياسي - التباين-	1d	5d	<b>5-4</b> <b>يستخدم الأرقام و الحساب و الطرق الإحصائية فضلا عن تكنولوجيا المعلومات</b>
X			X	كتاب الطالب	الكسور الجزئية توفيق المنحنيات المصفوفات و المحددات جبر المصفوفات و المحددات	2d	11d	<b>5-10</b> <b>ينمي مهارات التفكير النقدي و حل المشكلات و اتخاذ القرارات</b>

					حل المعادلات الخطية باستخدام المصفوفات أو المحددات		

النهايات و حساب  
التفاضل

بعض التطبيقات في  
حساب التفاضل:  
المعادلات الزمنية

معادلة المماس و العمودي

النهايات العظمى و  
الصغرى للدوال

رسم المنحنى

مقدمة في الاحتمالات و  
الإحصاء:  
حساب المتوسط الحسابي

الانحرافقياسي

- التباين

منسق المقرر: أ.د / ياسر عبد العزيز عامر

التاريخ: 2018/9/

**COURSE  
SPECIFICATIONS**

**Human Rights and  
Professional  
Ethics**

**First year – second Term  
2018-2019**

# توصيف مقرر حقوق الإنسان وأخلاقيات المهنة

كلية الصيدلة

جامعة الزقازيق

## أ- مواصفات المقرر:

البرنامج أو البرامج التي يقدم من خلالها المقرر: بكالوريوس الصيدلة  
المقرر يمثل عنصراً رئيسياً أو ثانوياً بالنسبة للبرامج: ثانوياً  
القسم العلمي المسئول عن البرنامج: -----

المسئول عن تدريس المقرر: د. ياسمين أحمد شرف  
السنة الدراسية: الفرقة الأولى – التيرم الثاني.

تاريخ اعتماد التوصيف:

## (ب) البيانات الأساسية:

العنوان : حقوق الإنسان وأخلاقيات المهنة  
الكود : HR120  
الساعات المعتمدة : ---

المحاضرات : ساعتان أسبوعياً  
العملي: ---

الدورsov 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 وأنواعه وأسبابه وأثاره وكيفية مجابهة الفساد

### 2) النتائج التعليمية المستهدفة لمقرر حقوق الإنسان:

أ- المعرفة والفهم	
1	يعرف المقصود بحقوق الإنسان ومصدرها وأنواع حقوق الإنسان الفردية والجماعية وكيفية حمايتها
2	يفهم الفساد وأنواعه وأسبابه وأثاره
3	يعرف كيفية مجابهة الفساد ودور الأجهزة الرقابية في مجابهة الفساد داخل الدولة
د- المهارات العامة والمنقلة	
1	يعمل بكفاءة كأحد أفراد الفريق.
2	ينمي شخصية الفرد من خلال معرفة الحقوق الفردية والجماعية للإنسان.

## د- المحتويات:

المحاضرة (٢ ساعة/ الأسبوع)	الأسبوع
- مقدمة - التطور التاريخي لفكرة حقوق الإنسان	١
- التعريف بحقوق الإنسان - خصائص و مبادئ حقوق الإنسان	٢
مصادر حقوق الإنسان أنواع حقوق الإنسان الفردية والجماعية	٣ ٤
- مكافحة الفساد - مفهوم الفساد - أنواع وصور الفساد	٥
- أسبابو اثار الفساد الامتحان نصف الفصل	٦ ٧
- وسائل مواجهة الفساد الإطار التشريعي لمكافحة الفساد	٨
- دور الأجهزة الرقابية الوطنية في مكافحة الفساد الإداري - هيئة الرقابة الإدارية ودورها في مكافحة الفساد الإداري.	٩
- الجهاز المركزي للمحاسبات ودوره في مكافحة الفساد الإداري	١٠
- الجهاز المركزي للتنظيم والإدارة ودوره في مكافحة الفساد الإداري	١١
- هيئة النيابة الإدارية ودورها في مكافحة الفساد الإداري	١٢
- اللجان الأخرى المعنية بمكافحة الفساد فجمهورية مصر العربية:	١٣
- مراجعة عامة و مناقشة حرره الامتحان النهائي	١٤ ١٥

## هـ أساليب التعليم و التعلم:

- المحاضرة
- المناقشة

• المقرر الالكتروني Internet  
و-أساليب تقييم الطلبة:

- 1- الامتحان التحريري يقيم: أ1 و أ2 و أ3 و د1 و د2 و د3
- 2- الامتحان نصف الفصل يقيم: أ1 و أ2 و أ3 و د1 و د2 و د3

**الجدول الزمني التقييم:**

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

**ترجح التقييم:**

النسبة المئوية	الدرجات	طريقة التقييم
%80	80	امتحان التحريري
%20	20	امتحان نصف الفصل
%100	100	الإجمالي

**ز- التسهيلات اللازمة للتعليم و التعلم:**

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

**ي- قائمة المراجع:**

1- الانترنت : المقرر الالكتروني

2- كتب مقتربة

القانون الدولي الإنساني

**4- مجلات دورية، موقع انترنت، الخ**

مجلات حقوق الإنسان

منسق المقرر: د. ياسمين أحمد شرف  
التاريخ:

مصفوفة 1 مقرر حقوق الإنسان و أخلاقيات المهنـة											
نتائج التعلم المنشودة لمادة حقوق الإنسان						محتويات المقرر					
مهارات عامة و تواصلية			المعرفة و الفهم								
3د	2د	1د	3أ	2أ	1أ						
					x	- مقدمة - التطور التاريخي لفكرة حقوق الإنسان					
				x		- التعريف بحقوق الإنسان - خصائص و مبادئ حقوق الإنسان					
				x		مصادر حقوق الإنسان					
x	x	x		x		أنواع حقوق الإنسان الفردية والجماعية					
			x			- مكافحة الفساد(مفهوم الفساد-أنواع وصور الفساد)					
			x			- أسباب الفساد					
			x			- آثار الفساد					
x	x	x	x			- وسائل مجابهة الفساد(الإطار التشريعي لمكافحة الفساد)					
			x			- دور الأجهزة الرقابية الوطنية في مكافحة الفساد الإداري - هيئة الرقابة الإدارية ودورها في مكافحة الفساد الإداري.					
			x			- الجهاز المركزي للمحاسبات ودوره في مكافحة الفساد الإداري					
			x			- الجهاز المركزي للتنظيم والإدارة ودوره في مكافحة الفساد الإداري					
			x			- هيئة النيابة الإدارية ودورها في مكافحة الفساد الإداري					
			x			- اللجان الأخرى المعنية بمكافحة الفساد فجمهورية مصر العربية:					
x	x	x	x	x	x	مراجعة عامة و مناقشة حرـه					

مصفوفة 2 مقرر حقوق الإنسان و أخلاقيات المهنـة								
أسلوب التقييم	أساليب التعليم و التعلم			المصدر	محتويات المقرر	نتائج التعلم المنشودة للمقرر	نتائج التعلم المنشودة للبرنامج	المعايير الأكاديمية المرجعية القومية (NARS)
الامتحان التحريري	التعلم الذاتي	الدروس العملية	المحاضرة					
x			x	المقرر الإلكتروني	- مقدمة - التطور التاريخي لفكرة حقوق الإنسان			
x			x	المقرر الإلكتروني	- التعريف بحقوق الإنسان - خصائص و مبادئ حقوق الإنسان			
x			x	المقرر الإلكتروني	مصادر حقوق الإنسان	1		
x			x	المقرر الإلكتروني	أنواع حقوق الإنسان الفردية والجماعية	5		مباديء العلوم الأساسية و الصيدلانية و الطبية و الاجتماعية و السلوكية و الإدارية و الصحة و العلوم البيئية فضلا عن ممارسة الصيدلة
x			x	المقرر الإلكتروني	- مكافحة الفساد(مفهوم الفساد-أنواع و صور الفساد)			2.1
x			x	المقرر الإلكتروني	أسباب الفساد	2		
x			x	المقرر الإلكتروني	- آثار الفساد			
x			x	المقرر الإلكتروني	- وسائل مواجهة الفساد(الإطار التشريعي لمكافحة الفساد)	3		

			X	المقرر الإلكتروني	- دور الأجهزة الرقابية الوطنية في مكافحة الفساد الإداري - هيئة الرقابة الإدارية ودورها في مكافحة الفساد الإداري.				
X			X	المقرر الإلكتروني	- الجهاز المركزي للمحاسبات ودوره في مكافحة الفساد الإداري				
X			X	المقرر الإلكتروني	- الجهاز المركزي للتنظيم والإدارة ودوره في مكافحة الفساد الإداري				
X			X	المقرر الإلكتروني	- هيئة النيابة الإدارية ودورها في مكافحة الفساد الإداري				
X			X	المقرر الإلكتروني	- اللجان الأخرى المعنية بمكافحة الفساد فجمهورية مصر العربية:				
X			X	المقرر الإلكتروني	أنواع حقوق الإنسان الفردية والجماعية				
X			X	المقرر الإلكتروني	- مكافحة الفساد(مفهوم الفساد-أنواع وصور الفساد)				
X			X	المقرر الإلكتروني	- أسباب الفساد				
X			X	المقرر الإلكتروني	- اللجان الأخرى المعنية بمكافحة الفساد فجمهورية مصر العربية:				
X			X	المقرر الإلكتروني	أنواع حقوق الإنسان الفردية والجماعية	1د	يعمل بكفاءة كأحد أفراد الفريق	5.3	

			X	المقرر الالكتروني	- مكافحة الفساد(مفهوم الفساد-أنواع وصور الفساد)					
X			X	المقرر الالكتروني	- أسباب الفساد		3د			
X			X	المقرر الالكتروني	- مقدمة - التطور التاريخي لفكرة حقوق الإنسان					
X			X	المقرر الالكتروني	- التعريف بحقوق الإنسان - خصائص و مبادئ حقوق الإنسان		2د	8د		
X			X	المقرر الالكتروني	مصادر حقوق الإنسان					
X			X	المقرر الالكتروني	أنواع حقوق الإنسان الفردية والجماعية					
X			X	المقرر الالكتروني	- مكافحة الفساد(مفهوم الفساد-أنواع وصور الفساد)					
X			X	المقرر الالكتروني	- أسباب الفساد					
X			X	المقرر الالكتروني	- آثار الفساد		3د	11د		
X			X	المقرر الالكتروني	- وسائل مواجهة الفساد(الإطار التشريعي لمكافحة الفساد)					

منسق المقرر: د. ياسمين أحمد شرف  
رئيس القسم:  
التاريخ: 2019/9/









