

# **COURSE REPORTS**

## **Faculty of Pharmacy**

**Third Year – Second Term**

**2019-2020**

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**COURSE REPORT**

**Sterile Products and  
Controlled Drug  
Delivery Systems**

**Third year – second Term  
2019-2020**

## Annual Course Report

University: Zagazig  
Pharmaceutics

Faculty: Pharmacy

Department:

### Course Report

#### A- Basic Information

1. Title: Sterile Products and Controlled Drug Delivery Systems Code: PC325

2. Programme(s) on which this course is given: Bachelor of Pharmacy

3. Year/ Level of programme: Third year/Second semester

4. Units/Credit hours:

Lectures  Tutorial/Practical  Total

5. Names of lecturers contributing to the delivery of the course:

Assis Prof. Gehan Fathy

Dr/ Eman Gomaa

Dr. Noura Gamal

Course co-ordinator: Prof.Dr Gehan Fathy

External evaluator: no course evaluation done this year because of corona pandemic

For 2018-2019: Prof.Dr Fawzya Habeb

(Mansoura University)

#### B- Statistical Information

No. of students attending the course:

No.  %

No. of students completing the course:

No.  %

Grading of successful students:

Excellent:  No.  %

Good :  No.  %

Very Good:  %

No.

Pass:  %

No.

## C- Professional Information

### 1 - Course teach

Topics actually taught	No. of hours	Lecturer
- Introduction to drug delivery systems - Advantages & disadvantages of delayed release dosage forms - Enteric coating - Colon specific drug delivery	2	Dr. noura gamal
- Gastroretentive drug delivery systems - Diffusion based sustained release dosage forms - Bioerodible sustained release dosage forms - Osmotic pressure activated controlled drug delivery - Targeted release dosage forms	2	
Liposomes	2	
Niosomes	2	Dr. eman gomaa
Microemulsion	2	Dr. Gehan balata
- Introduction to parenteral preparations - Advantages & disadvantages of parenterals - Requirements for parenteral preparations - Routes of parenteral administration - Classification of parenteral preparations	2	
Sterilization techniques moist heat , dry heat, radiation, gas and filtration	2	
Formulation of parenterals	2	
- Packaging of parenterals. - Quality control tests of parenteral preparations	2	
Ophthalmic preparations	2	
Aerosols	2	Dr. eman gomaa

Topics taught as a percentage of the content specified:

>90%  ✓  70-90%  <70%

Reasons in detail for not teaching

any topic

Because of Corona pandemic and change of assessment method, students' activity through the course was cancelled

If any topics were taught which are not specified, give reasons in detail

2- Teaching and learning methods:

Lectures:	<input checked="" type="checkbox"/>
Practical training/ laboratory:	<input checked="" type="checkbox"/>
Seminar/Workshop:	<input type="checkbox"/>
Class activity:	<input type="checkbox"/>
Case Study:	<input type="checkbox"/>

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Because of Corona pandemic and suspension of the study since 15 March, the lectures and laboratory were delivered to the students through telegram channel.

### 3- Course learning outcome assessment:

Because of Corona Pandemic, the assessment methods were modified according to the decision of Supreme Council of Universities.

The final written exam was replaced by preparation of project in a topic related to the course. The projects were prepared individually not in groups. Each project objectives were announced to the students through orientation lecture as well as rules for preparation and assessment of the project. Students follow up were done through email or whats app as contact information for staff members were announced as well. After receiving and assessing the projects, feedback about students performance was announced to the students as well. The assessment criteria included: fulfilling topic objectives, organization of ideas, grammar and sentence structure, project formatting and references used. All the projects were evaluated according to the scale of pass or fail and so no marks or grades were recorded.

#### List of projects:

Teaching staff	List of projects
Assis. Prof. Gehan Balata	1. Pharmaceutical aerosols 2. Parental preparations 3. Parental formulation

	<p>4. Formulation and evaluation of an injectable solution</p> <p>5. Large volume parenterals</p>
<b>Dr. Noura gamal</b>	<p>1.Immediate release systems</p> <p>2.Modified release systems (Definition)</p> <p>Delayed release dosage forms (Definition)</p> <p>Small intestine-specific delivery (enteric-coated)</p> <p>3.Modified release systems (Definition)</p> <p>Delayed release dosage forms (Definition)</p> <p>Colon-specific drug delivery</p> <p>4.Extended release dosage forms</p> <p>5. Dissolution-based sustained release dosage forms (mechanism)</p> <p>Diffusion-based sustained release dosage forms</p> <p>6. Gastro-retentive drug delivery systems</p> <p>7. Bio-erodible sustained release dosage forms</p> <p>Osmotic pressure-activated controlled DDS</p> <p>8. Targeted release dosage forms</p> <p>9. Liposomes</p>
<b>Dr. Eman gomaa</b>	<p>1. Liposomes</p> <p>2. Stealth technology</p> <p>3. Storage and stability of Liposomes</p> <p>4. Niosomes are nonionic surfactants vesicles</p> <p>5. Ophthalmic preparations</p> <p>6. Ideal ophthalmic delivery</p> <p>7. Ocular inserts</p>

4- Facilities and teaching materials:

Totally adequate

-
---

Adequate to some extent

√
---

Inadequate

-
---

List any inadequacies

-
---

5- Administrative constraints

List any difficulties encountered

Absence of well equipped computer lab with good internet connection and IT technician to help teaching staff if there is any difficulty in preparing and uploading lectures

6- Student evaluation of the course:	Response of course team
Students were satisfied about the course but they complained from e-learning part of practical sessions as it was calculations that necessities more interaction with students	Will be considered

7- Comments from external evaluator(s):  
team

Response of course team

Evaluator comment in 2018-2019:

The course is properly designed

No evaluation was done in 2020 due to corona pandemic

8- Course enhancement:

Action required	Completion	Person responsible
Using additional learning and teaching methods such as group discussion to encourage students to interact effectively with lecturers.	Completed by applying e-learning	Course team
Addition of activity regarding application of the theoretical part through collection of marketed products and writing reports discussing their formulation properties, ingredients and	Uncompleted Due to cancellation of activity due to corona pandemic	Course team



use		
Measurement of ILOS of course	Uncompleted Due to change of assessment method into projects preparation	Course team

9- Action plan for academic year 2020- 2021

Action required	Completion date	Person responsible
Implementation of blended learning	2020/2021	Course team
Addition of activity regarding application of the theoretical part through collection of marketed products and writing reports discussing their formulation properties, ingredients and use	2020/2021	Course team
Apply electronic exams	2020/2021	Course team

Course coordinator: Prof Dr Gehan Fathy

Signature:



**COURSE REPORT**

**Phytochemistry-1**

**Third year – second Term  
2019-2020**

## Annual Course Report (2019-2020)

University: Zagazig  
Pharmacognosy

Faculty: Pharmacy

Department:

### Course Report

#### A- Basic Information

1. Title and code: Phytochemistry I Code: PG324
2. Programme(s) on which this course is given: Bachelor of Pharmacy
3. Year/ Level of programme: Third year / second semester
4. Units/Credit hours: .....

Lectures  Tutorial/Practical  Total

5. Names of lecturers contributing to the delivery of the course:

Prof. Dr. Maher El-Domiaty

Prof. Dr. Mahmoud AbdAlaal

Prof. Dr. Azza Al-Shafae

Prof. Dr. Fawkeya Abbas

A Prof. Maged Abou-Hashem

Dr. Islam Mostafa

Dr. Nora Tawfeek

Course co-ordinator: Prof. Dr. Mahmoud AbdAlaal

External evaluator: Prof. Dr. Hesham El-Askary

#### B- Statistical Information

No. of students attending the course: No.  %

No. of students completing the course: No.  %

Results:

Passed: No.  % Failed: No.  %

Grading of successful students:

Excellent: No.  %  Very Good:  %   
 No.   
 Good : No.  %  Pass:  %   
 No.  792 % 99.9

C- Professional Information

1 - Course teaching

Topics actually taught	No. of hours	
<b>Glycosides</b> Classification, isolation and properties	2	Prof. Dr. Mahmoud AbdAlaal
<b>Glycosides</b> Phenolic glycosides, cyanogenic glycosides, thioglycosides	2	Prof. Dr. Mahmoud AbdAlaal
<b>Glycosides</b> Cardiac glycosides	2	Prof. Dr. Maher El-Domiatty
<b>Glycosides</b> Flavonoids and coumarins	2	Dr. Islam Mostafa
<b>Glycosides</b> Anthraquinones, saponins and miscellaneous glycosides	2	Prof. Dr. Mahmoud Abd Alaal
<b>Tannins and antioxidants</b>	2	Prof. Dr. Fawkeya Abbas
<b>Carbohydrates</b> Definition, classification, properties, evaluation, drugs containing carbohydrates	2	A. Prof. Maged Abou-Hashem
<b>Carbohydrates</b> Heteropolysaccharides and holopolysaccharides	2	A Prof. Maged Abou-Hashem
<b>Bitter principals and minerals</b>	2	Prof. Dr. Azza Al-Shafeay
<b>Natural carotenoids</b>	2	A Prof. Maged Abou-Hashem
<b>Resins and resin</b>	2	Prof. Dr. Fawkeya Abbas

<b>combination</b>		
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Topics taught as a percentage of the content specified:

>90%  70-90%  <70%

Reasons in detail for not teaching any topic

Because of Corona pandemic and change of assessment method, students' activity through the course was cancelled

If any topics were taught which are not specified, give reasons in detail

2- Teaching and learning methods:

Lectures:	<input checked="" type="checkbox"/>
Practical training/ laboratory:	<input type="checkbox"/>
Seminar/Workshop:	<input type="checkbox"/>
Class activity:	<input type="checkbox"/>
Case Study:	<input checked="" type="checkbox"/>

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons: Internet based research and visits to community pharmacy to be in touch with applications of the course in the market and renew information.

3- Student assessment:

Because of Corona Pandemic, the assessment methods were modified according to the decision of Supreme Council of Universities.

The final written exam was replaced by preparation of project in a topic related to the course. Each project objectives were announced to the students through orientation lecture as well as rules for preparation and assessment of the project. After receiving and assessing the

projects, feedback about students performance was announced to the students as well. All the projects were evaluated according the the scale of pass or fail and so no marks or grades were recorded.

#### List of projects:

Teaching staff	List of projects
Prof. Dr. Mahmoud AbdAlaal	Glucosinolates
Prof Dr. Fawkeya Abbas	Flavonoids Coumarines
A. Prof. Maged Abou-Hashem	Carbohydrates
Dr. Nora Tawfeek	Anthracenes Antioxidants
Dr. Islam Mostafa	Terpenes

#### 4- Facilities and teaching materials:

Totally adequate

-

Adequate to some extent

√

Inadequate

-

List any inadequacies:

Poor internet and difficulty of lecture download for some students

#### 5- Administrative constraints

Absence of well equipped computer lab with good internet connection and IT technician to help teaching staff if there is any difficulty in preparing and uploading lectures

#### 6- Student evaluation of the course:

List any criticism	Response of course team
<p>Generally students were satisfied about the course but they complained from assessment through projects preparation in the following point:</p> <ul style="list-style-type: none"> <li>No follow up from some staff members.</li> <li>No determination of list of references for each project.</li> </ul>	<p>-</p> <ul style="list-style-type: none"> <li>-Insert preparation of projects as a tool for assessment</li> <li>-Good planning for students projects regarding time.</li> </ul>

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Not enough time for projects preparation</li> </ul> |  |
|--|--|

**7- Teaching staff evaluation of online learning and student assessment by projects:**

-Generally, staff members were satisfied about online learning but they mentioned problems that students may face like unavailability of computers or weak internet connection.

-Unavailability of formal platform for the faculty to organize the interaction process with students.

-Unavailability of teaching studio equipped with audiovisual facilities for recording lectures.

**8- Comments from external evaluator(s):**

- The course was well designed .
- ILOs were properly written .

**9- Course enhancement:**

-Progress on actions identified in the previous year's action plan:

**Action**

Availability of some chemicals and material required for practical sessions

Completed

Improvement of course books

Not completed

Using illustrative videos

Completed

**9- Action plan for academic year 2020 - 2021**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
Improvement of course books	2020-2021	Course coordinator
Renew of the practical schedule		

Continuous evaluation for the students  
during practical sessions (3 exams)

**Course coordinator: Prof. Dr. Mahmoud AbdAlaal**

**Head of Department: Prof Dr. Amal Al-Gendy**

Signature:

Date: 29/09/2020





**COURSE REPORT**

**Pharmacology -2**

**Third year – second Term  
2019-2020**

## Course Report of Pharmacology II

**University:** Zagazig    **Faculty:** Pharmacy    **Department:**  
Pharmacology and Toxicology

### A- Basic Information:

- 1. Title and code: Pharmacology II PT322**
- 2. Programme(s) on which this course is given: Bachelor of Pharmacy**
- 3. Year/ Level of programme: Third year (second semester)**
- 4. Units/Credit hours:**

Lectures       Tutorial/Practical       Total

### 5. Names of lecturers contributing to the delivery of the course:

- Prof.Dr/ Rasha Hassan Abdel Ghany
- Prof.Dr/ Atef Saad
- Dr. Esraa Mohammad Naguib

**6. Course coordinator:** Prof.Dr/ Atef Saad

**7. External evaluator:** Prof.Dr/ Alaa El-sissy (Tanta University)

### B- Statistical Information:

No. of students attending the course:      No.  %

No. of students completing the course:      No.  %

Results:

Passed:    No.  %     Failed:       %   
No.

## C- Professional Information:

### 1 - Course teaching:

Topics actually taught	No. of hours	Lecturer
• Degenerative disorders and spasticity.	2	Prof. Dr/ Rasha Hassan Abdel Ghany
• Drugs used for treatment of anxiety and sleep disorders. • Treatment of depression and mania. • Drugs used for treatment of mania and bipolar disorder	2	
• Drugs used for treatment of psychosis and anxiety.	2	
• Antiepileptic drugs.	2	
• Anti hyperlipidemic drugs	2	Prof Dr Atef Saad
• Drugs used in coagulation and bleeding disorders.	2	
• Autacoids	2	
• Anti-inflammatory, antipyretic and analgesic agents.	2	
• Respiratory system pharmacology.	2	Dr Esraa Mohammad Naguib
• Gastrointestinal pharmacology.	2	
• Pain control with general and local anaesthetics.	1	
• Central nervous system stimulants.	2	
• Drugs used for treatment of anemia • Hematopoietic growth factors.	1	
• Revision and open discussion	2	

### Topics taught as a percentage of the content specified:

>90%

 √

70-90%

<70%

**Reasons in detail for not teaching any topic: -----**

**If any topics were taught which are not specified, give reasons in detail: -----**

## **2- Teaching and learning methods:**

Lectures (In-class or online):	<input type="checkbox"/>
Practical training/ laboratory:	<input checked="" type="checkbox"/>
Seminar/Workshop:	<input type="checkbox"/>
Class activity:	<input type="checkbox"/>
Case Study:	<input checked="" type="checkbox"/>
Other assignments/homework:	<input type="checkbox"/>

If teaching and learning methods were used other than those specified, list and give reasons:

## **3- Student assessment:**

Because of COVID-19 Pandemic, the assessment methods were modified according to the descision of The Supreme Council of Universities.

The final written exam was replaced by preparation of a research project in a topic related to the course. Each project objectives were announced to the students through orientation lecture as well as rules for preparation and assessment of the project. After receiving and assessing the projects, feedback about students performance was announced to the students as well. All the projects were evaluated according the the scale of pass or fail and so no marks or grades were recorded.

- Members of assessment committee:

Prof. Dr/ Rasha Hassan Abdel Ghany

Prof. Dr / Atef Saad

Dr/ Esraa Mohammad Naguib

**List of projects:**

<b>Name of lecturer</b>	<b>Title of project</b>
<p><b>Prof. Dr/ Rasha Hassan Abdel Ghany</b></p>	<p>Citalopram-Fluoxetine-Fluvoxamine-Paroxetine-Sertraline-Duloxetine-Venlafaxine-Bupropion-Mirtazapine-Amitriptyline-Clomipramine-Desipramine-Doxepin-Imipramine-Maprotiline-Isocarboxazid-Phenelzine-Selegiline-Tranlycypromine-Carbamazepine-Diazepam-Divalproex-Lorazepam-Phenobarbital-Phenytoin-Primidone-Clobazam-Felbamate-Gabapentin-Lacosamide-Lamotrigine-Levetiracetam-Tiagabine-Topiramate-Vigabatrin-Zonisamide-Amantadine-Apomorphine-Benztropine-Bromocriptine-Levodopa (w/Carbidopa)-Pramipexole-rihexyphenidyl-Procyclidine-Ropinirole-Rotigotine (dopamine agonist)-Alprazolam-Chlordiazepoxide-Clonazepam-Midazolam-Triazolam-Amobarbital-Thiopental-Diphenhydramine-Doxepin-Hydroxyzine-Zolpidem-Zaleplon-Eszopiclone-Ramelteon-Buspirone-Chlorpromazine-Thioridazine-Fluphenazine-Haloperidol-Pimozide-Aripiprazole-Clozapine-Olanzapine-Quetiapine-Risperidone-Ziprazidone.</p>
<p><b>Prof. Dr / Atef Saad</b></p>	<p>Hydroxy methylglutaryl Coenzyme A- reductase (HMG CoA) inhibitors-Fibrates for hyperlipidemia-Bile acid sequestrates for hypercholesterolemia-Omega -3-Ezetimibe for hyperlipidemia-Heparine-Warafarin- -Direct thrombin inhibitors Factor Xa inhibitors-Dipyridamol-Clopidogrel-Ticlopidine-Glycoprotein IIb/IIa receptor inhibitors Fibrinolytic ( Thrombolytic) agents-Treatment of bleeding disorders- -Allupurinol Colchicin-Probenicid-Non steroidal anti-inflammatory drugs (non selective COX1 inhibitors) Non steroidal anti-inflammatory drugs ( COX2) Acetaminophen-treatment of rheumatoid arthritis Treatment of migraine- H1 blockers-Serotonine- -H2 blockers- Opioid Agonists- Opioid antagonists- Tramadol</p>
<p><b>Dr/ Esraa Mohammad Naguib</b></p>	<p>Salbutamol-terbutaline-Salmeterol-Foremeterol-Dexamethasone-methylprednisolone-budesonide-Fluticasone-Theophylline-ipratropium-zileuton-</p>

	<p>Montelukast-zafirlukast-Caffeine-diphenhydramine-  Chlorpheniramine-loratadine-fexofenadine-citirzine (or  levocitrizine)-Phenylephrine-xylometazoline-codeine-  Bismuth subsalicylate-omeprazole-lansoprazole-  Pantoprazole-Cimetidine-ranitidine-famotidine-  Metoclopramide-Dompridone-Racecadotril-Loperamide-  Castor oil-Bisacodyl-Methylcellulose-Lactulose-  Sulfasalazine-ferrous fumarate-ferrous gluconate-  Iron dextran-ferrous sulfate-Hydroxycobalamine-  folic acid-Erythropoietin-Darbepoetin-filgrastim-  Propofol-Thiopental-Ketamine-Etomidate-Halothane-  Isoflurane-Sevoflurane-Cocaine-procaine-benzocaine-  Lidocaine-prilocaine-Amphetamine-methAmphetamine-  Methylphenidate-Phencyclidine-Caffeine-Tetrahydrocannabinol</p>
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#### 4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies:

- Limited internet service.

√

#### 5- Administrative constraints:

List any difficulties encountered:

- Assessment methods were not effective, did not cover the whole course and did not support deep learning.

#### 6- Student evaluation of the course:

List any criticism	Response of course team
E-learning was not enough substitute for traditional learning (58.18%)	E-learning was the only available method for learning during the pandemic COVID-2019 . Generally speaking, teaching pharmacology needs face to face communication which was impossible during the pandemic.
E-learning was not suitable for all students' needs for learning with different circumstances. (56.36%)	This was out of our control because some students don't have computers or have problems in internet connection.

**7- Teaching staff evaluation of online learning and student assessment by projects:**

Generally, staff members were satisfied about online learning but they mentioned problems that students may face like unavailability of computers or weak internet connection

Unavailability of **formal platform** for the faculty to upload lectures and organize the interaction process with students

Unavailability of teaching studio equipped with audiovisual facilities for recording lectures

**8- Comments from external evaluator(s):**

<b>Comments</b>
The course is well designed and measurable
ILOS are properly phrased

**9- Course enhancement:**

1. Progress on actions proposed for improving the course in previous course reports (if any).			
Actions recommended from the most recent course report(s)	Actions Taken	Action Results	Action Analysis
Updating the course content to fit the specified time and adding case studies to encourage students to think	Completed		
Update course content to develop self-learning and hold open discussions between students to encourage students to interact effectively with the lecturers.	Completed		
Providing the labs with internet connections	Could not be Completed due to administrative constrains.		
Measurement of ILOS of course			

2. Action Plan for Next Semester/Year				
Actions Recommended for Further Improvement	Intended Action Points (should be measurable)	Start Date	Completion Date	Person Responsible
Improving communication with students to facilitate learning.	Group discussion by partitioning the students to smaller groups to allow better communication and assessment of their academic achievement.	2020	2021	Course team
Enrich practical and professional skills of students	Introduce case studies and scenarios to the practical course to put the student in real-life situations and enhance their critical thinking and problem solving skills	2020	2021	Course team

- Course coordinator: Prof.Dr. Atef Saad

Signature:

Date:                    /        /





**COURSE REPORT**

**Biochemistry -2**

**Third year – second Term  
2019-2020**

## Annual course report

University: Zagazig

Faculty: Pharmacy

Department: Biochemistry

### A – Basic Information:

1. **Title and Code:** Biochemistry II BC321
2. **Program(s) on which this course is given:** Bachelor of Pharmacy
3. **Year / Level of programs:** third year (second term)
4. **Units / Credit hours:** 4 hrs

<b>Lectures</b>	3 hrs.	<b>Practical sessions</b>	2hrs.	<b>Total</b>	4 hrs.
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5. **Names of lecturers contributing to the delivery of the course:**

- *Prof. Sousou Ibrahim*
- *Prof. Rawia Sarhan*
- *Dr. Rania El-Rashidy*

6. **Course coordinator:** *Prof. Sousou Ibrahim*

7. **External evaluators:** *Prof. Mamdouh Elsheshtawy (Mansoura University)*

### B- Statistical Information:

<b>No. of students attending the course</b>	787	100%
<b>No. of students completing the course</b>	785	99.7%

<b>Results:</b>					
<b>Passed</b>	785	99.7%	<b>Failed</b>	2	0.3%
<b>Grading of successful students:</b>					
<b>Excellent</b>			<b>Very good</b>		
<b>Good</b>			<b>pass</b>		
<b>weak</b>					

## C- Professional Information:

### 1- Course teaching:

Topic	No of hours	Lecturers
- Carbohydrates digestion and absorption - Metabolism of mono and disaccharides - Glycolysis (Reactions, steps and regulation)	3	<i>Prof. Sousou Ibrahim</i>
- Gluconeogenesis (Reactions and regulation) - Tricarboxylic acid cycle (Reactions, regulation and calculation of energy produced)	3	
- HMP shunt (Reactions and functions) - Uronic acid pathway (Reactions)	3	
- Glycogen metabolism - Glycogenesis regulation - Glycogenolysis regulation	3	
- Digestion and absorption of lipids - Oxidation of fatty acids	3	
- Lipogenesis - Lipolysis in adipose tissues. - Phospholipid metabolism	3	<i>Prof. Rawia Sarhan</i>
- Ketone bodies metabolism	3	
- Cholesterol metabolism - Lipoproteins metabolism	3	
- Protein turnover - Digestion and absorption of dietary proteins. - Nitrogen metabolism - Transamination	3	
- Deamination - Transdeamination - Metabolism of ammonia - Urea cycle	3	<i>Dr. Rania El-Rashidy</i>
- Conversion of amino acids to specialized products - Metabolic correlation associated with some diseases	3	

### Topics taught as a percentage of the content specified:

>90 %	√	70 – 90 %		<70%	
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- **Reasons in detail for not teaching any topic: -----**

- **If any topics were taught which are not specified, give reasons in detail: -----**

## 2- Teaching and learning methods:

Lectures	√
Practical Training / Laboratory	√
Seminar / Workshop	-
Class activity	√
Case study	√
Other assignment / homework	-

- **If teaching and learning methods were used other than those specified, list and give reasons:** Because of Corona pandemic and suspension of the study since 15 March, the lectures and laboratory were delivered to the students through telegram channel.

## 3- Course learning outcome assessment:

- Because of Corona Pandemic, the assessment methods were modified according to the decision of Supreme Council of Universities.
- The final written exam was replaced by preparation of project in a topic related to the course. Each project objectives were announced to the students through orientation lecture as well as rules for preparation and assessment of the project.
- After receiving and assessing the projects, feedback about students performance was announced to the students as well.
- All the projects were evaluated according to the scale of pass or fail and so no marks or grades were recorded.

## List of projects

Teaching staff	List of projects
<b>Prof. Sousou Ibrahim</b>	1-Vitamin C-producing pathways and why we need dietary vitamin C 2- Some oxidative pathways of glucose not producing energy 3- Disorders of carbohydrate digestion 4- Role of liver in the inter-conversion of different sugars 5- Metabolic disorders of some glycolytic enzymes

	<ul style="list-style-type: none"> <li>6- Sources and fate of lactate- lactic acidosis</li> <li>7- Fate of pyruvate and its sources</li> <li>8- Catabolic functions of Krebs's cycle</li> <li>9- Vitamins needed for Krebs's cycle</li> <li>10- Anabolic functions of Krebs's cycle</li> <li>11- Metabolic functions of HMP shunt</li> <li>12- Cori, Rapoport lubering cycles and their relationship with metabolism</li> <li>13- Energy producing oxidative pathways of glucose</li> <li>14- Functions and metabolic disorders of uronic acid pathway</li> <li>15- Gluconeogenesis</li> <li>16- Disorders of fructose metabolism</li> <li>17- Metabolic disorders of glycogenesis</li> <li>18- Metabolic disorders of glycogenolysis</li> <li>19- Blood sugars, types of coma, biochemical tests</li> </ul>
<p><b>Prof. Rawia Sarhan</b></p>	<ul style="list-style-type: none"> <li>1- Digestion of lipids- types of lipases- site and tissue formation</li> <li>2- Absorption of lipids</li> <li>3- Regulation of lipolysis</li> <li>4- Depot fat and tissue fat</li> <li>5- beta and alpha oxidation</li> <li>6- Lipogenesis</li> <li>7- Types of fatty acid synthesis</li> <li>8- Triglycerides synthesis</li> <li>9- Dyslipidemia</li> <li>10- Type 1 hyperlipidemia</li> <li>11- Type 1 hyperlipoproteinemia</li> <li>12- Type 2 hyperlipoproteinemia</li> <li>13- Type 3 hyperlipoproteinemia</li> <li>14- Type 4 hyperlipoproteinemia</li> <li>15- Secondary hyperlipoproteinemia</li> <li>16- Fatty liver, types, causes, treatment</li> <li>17- lipids and cardiovascular disease</li> <li>18- lipoproteins, definition, types, separation</li> <li>19- Apolipoproteins, definition, types and roles</li> <li>20- Chylomicron and VLDL metabolism</li> <li>21- HDL and LDL metabolism</li> <li>22- keton bodies, definition, types and role</li> <li>23- ketogenesis and ketolysis</li> <li>24- Cholesterol synthesis and importance</li> <li>25- Phospholipids, types, role, digestion and synthesis</li> </ul>

<b>Dr. Rania El-Rashidy</b>	1- Protein digestion and absorption 2- Transamination and deamination reactions 3- Urea cycle and associated inborn errors 4- Glycine and alanine amino acids 5- Basic amino acids 6- Acidic amino acids 7- Branched chain amino acids and associated inborn errors 8- ketogenic amino acids 9- Hydroxy containing amino acids 10- Sulfur containing amino acids 11- Aromatic amino acids associated inborn errors 12- Phenylketonuria 13- Hyperammonemia 14- Glutathione
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#### 4- Facilities and Teaching Materials:

Totally adequate	
Adequate to some extent	√
Inadequate	

#### List any inadequacies:

- Poor internet.

#### 5- Administrative Constraints:

- Absence of computer labs, good internet connection and IT technician to help teaching staff if there is any difficulty in preparing and uploading lectures

#### 6- Students evaluation of the course:

List of any criticism	Response of course team
Most students are generally satisfied with the course and its specific objectives.	-----
Modern teaching strategies should be involved in the course.	Case studies and videos are included whenever is possible
The course didn't sufficiently encourage self-learning and internet search skills.	Self-learning topics already present in the course and more will be included.

E-learning is not suitable for all students due to difficult circumstances and it shouldn't replace traditional lectures.	We will search for alternatives for students who have problems with E-learning and we depend mainly on traditional lectures.
More communication between students and lecturers is required.	Different communication methods are provided to students by lecturers.

**7- Teaching staff evaluation of online learning and student assessment by projects:**

- Staff members were generally satisfied about online learning and stated that most students got benefit from online learning in writing scientific papers and improving their self-learning skills
- Some problems were mentioned by staff members such as: absence of equipped computer labs and poor internet connection to upload their lectures.
- Staff members also mentioned that students faced difficulties in downloading some lectures due to their relatively large size and poor internet connection.

**8- Comments from external evaluator(s):**

Comments from external evaluator:	Response of course team
Well structured course design	

**9- Course Enhancement:**

Action	State whether or not completed and give reasons for any non completion
The course and its book need to be simplified	Completed
References to be updated	Completed

**10- Action plan for academic year 2020– 2021:**

Action required	Completion date	Person responsible
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<ul style="list-style-type: none"> <li>• Involvement of modern teaching strategies in the course.</li> <li>• Including more self-learning activities.</li> <li>• More communication between students and lecturers.</li> </ul>	2020 – 2021	Course team
<ul style="list-style-type: none"> <li>• Search for alternatives for students who have problems with E-learning.</li> </ul>	2020 – 2021	Faculty vice dean and course team
Faculty platform to deliver lectures and practical sessions to students and to evaluate students on more confidential procedures.	2020 – 2021	Faculty vice dean and course team

**Course Coordinator:** *Prof. Sousou Ibrahim*

**Signature:**

**Head of Biochemistry department:** *Ass. Prof. Nahla Nabil Younis*

**Signature:**

**Date:** Course report was approved in department council on





**COURSE REPORT**

**Parasitology and  
Pathology**

**Third year – secondTerm  
2019-2020**

## Course Report of Parasitology and Pathology

Institution: Zagazig University
Faculty : Pharmacy

### A- Basic Information:

1. Program (s) on which the course is given: Bachelor of pharmacy
2. Major or Minor element of programs: Major
3. Code: <b>MI322</b>
4. Department offering the course: Microbiology & Immunology
5. Academic year Level: Third year- second term

Units/Credit hours:

Lectures                       Practical                       Total

### 5. Names of lecturers contributing to the delivery of the course:

Prof. Dr/ Ghada Hamed Shaker.  
 Prof.Dr/ Mona abdelmonem  
 Dr /Moamen Mahmoud Ezz ELarab  
 Dr/ Shimaa Nazeih

**6. Course coordinator:** Prof. Dr/ Ghada Hamed Shaker

### 7. External evaluator:

**External evaluator:** Prof. Dr/ Abdel Gawad Hashem

### B- Statistical Information:

No. of students attending the course:                      No.  %   
 No. of students completing the course:                      No.  %

#### Results:

Passed:  No.                       Failed:  %   
 No.

#### Grading of successful students:

Excellent:  No.  %                      Very Good: No.  %   
 Good :  No.  %                      Pass: No.  %

### C- Professional Information:

#### 1 - Course teaching:

Topics actually taught	No. of hours	Lecturer
General introduction Trematodes	6	Prof. Dr/ Ghada Hamed Shaker
Cestodes	8	Dr/ Shimaa Nazeih
Nematodes		
Protozoology	8	Dr /Moamen Mahmoud Ezz ELarab
Entomology		
Pathology	6	Prof.Dr/ Mona abdelmonem

#### Topics taught as a percentage of the content specified:

>90%

70-90%

<70%

#### Reasons in detail for not teaching any topic:

Because of Corona pandemic and change of assessment method, students' activity through the course was cancelled

#### If any topics were taught which are not specified, give reasons in detail:

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: role play

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Because of Corona pandemic and suspension of the study since 15 March,

the lectures and laboratory were delivered to the students through telegram channel.

### 3- Course learning outcome assessment:

Because of Corona Pandemic, the assessment methods were modified according to the descision of Supreme Council of Universities.

The final written exam was replaced by preparation of project in a topic related to the course. Each project objectives were announced to the students through orientation lecture as well as rules for preparation and assessment of the project. After receiving and assessing the projects, feedback about students performance was announced to the students as well. All the projects were evaluated according the the scale of pass or fail and so no marks or grades were recorded.

### Evaluation of course content and final exam :

#### 4- Facilities and teaching materials:

Totally adequate

-
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Adequate to some extent

√
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Inadequate

-
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List any inadequacies:

- Poor internet and difficulty of lecture download for some students

#### 5- Administrative constraints:

Absence of well equipped computer lab with good internet connection and IT technician to help teaching staff if there is any difficulty in preparing and uploading lectures

#### 6- Student evaluation of the course:

List any criticism	Response of course team
Generally students were satisfied about the course but they complained from assessment through projects preparation in the following point:	-
-	insert preparation of projects as a tool for assessment
No follow up from some staff members	-
	ood planning for students projects

No determination of list of references for each project	regarding time, follow up, determination of objectives, references and assessment criteria
Not enough time for projects preparation	

**7- Teaching staff evaluation of online learning and student assessment by projects:**

Generally, staff members were satisfied about online learning but they mentioned problems that students may face like unavailability of computers or weak internet connection

Unavailability of formal platform for the faculty to organize the interaction process with students

Unavailability of teaching studio equipped with audiovisual facilities for recording lectures

**8- Comments from external evaluator(s):**

- The course was well designed
- ILOs were properly written

**9- Course enhancement:**

1. Progress on actions proposed for improving the course in previous course reports (if any).			
Actions recommended from the most recent course report(s)	Actions Taken	Action Results	Action Analysis
Internet services are inadequate	<ul style="list-style-type: none"> <li>• Addressing faculty dean to enhance internet services</li> </ul>	Students are satisfied	
Text books for the course in the library are not	Calling faculty administration to provide the library	Students are satisfied	Sustainment of action is required

sufficient and difficult to be borrowed from the librar	with additional copies of textbooks.  -Addressing the faculty Vice Dean for student affairs to make it easy for the students to borrow books from the library		
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Actions Recommended for Further Improvement	Start Date	Completion Date	Person Responsible
Revision of the course references	9/2020	9/2020	Course instructors
Apply electronic practical exam	2020-2021	2020-2021	Course instructors
Use storyboard that, program for preparing different scenarios about good and bad communication as an activity	9/2020	6/2021	Course instructors
Apply blended learning strategy	9/2020	6/ 2021	Course instructors
Development of search skills through course assignments	9/2020	6/ 2021	Course instructors
Arrangements for platform creation	2021	2022	Faculty administration

Course Coordinator: Prof. Dr/ Ghada Shaker

Head of Department: Prof. Dr. Nehal Elsayed Youssef

Date: 2020/ 9 / 30 تم مناقشة و اعتماد تقرير المقرر من مجلس القسم بتاريخ

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**COURSE REPORT**

**Medicinal Chemistry-2**

**Third year – secondTerm  
2019-2020**



## Course Report of Medicinal Chemistry-2

Institution: Zagazig University
Faculty : Pharmacy

### A- Basic Information:

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. Code: <b>MC321</b>
4. Department offering the course: <b>Medicinal Chemistry</b>
5. Academic year Level: <b>third year /Second term</b>

Units/Credit hours:

Lectures  Practical  Total

### 5. Names of lecturers contributing to the delivery of the course:

Prof. Dr/ Lobna Mohammed Abdel Aziz  
Prof.Dr/ Abdallah El-shanawany  
Prof. Dr/ Mansour Abu-kul  
Prof.Dr/Sobhy mohammed al adl  
Dr.Ahmed Samy

6. Course coordinator: Prof.Dr/Sobhy mohammed al adl

7. External evaluator: .....

### B- Statistical Information:

No. of students attending the course: No.  %   
No. of students completing the course: No.  %   
Results:  
Passed:  No.  Failed:  No.

## C- Professional Information:

### 1 - Course teaching:

Topics actually taught	No. of hours	Lecturer
Antineoplastic agents (Intercalating, Alkylating, metallating agents and antisense therapy).	2	Dr.Ahmed Samy
Antineoplastic agents (antimetabolites, hormones based therapy, cancer growth blockers, immunotherapy and monoclonal antibodies).	2	
Antiviral agents (Antiviral drugs used against DNA viruses i.e.inhibitors of viral DNA polymerase, inhibitors of tubulin polymerization, Antisense therapy and Antiviral drugs acting against RNA viruses: HIV) -	2	
Antiviral agents (Antiviral drugs acting against RNA viruses: flu virus and Hepatitis C).	2	
Anticoagulants & Antihyperlipidemic agents.	2	Prof.Dr/ Abdallah El-shanawany
Diagnostic agents	2	
Oral hypoglycemic agents (sulfonylurea derivatives)	2	Prof.Dr/Mansour Abu-kul
Oral hypoglycemic agents (biguanide derivatives)	2	
Antianginal agents & antiarrythmic drugs	2	Prof.Dr/Sobhy mohammed al adl
Antihypertensive agents (ACE inhibitors, Calcium channel blockers, and vasodilators)	2	
Antimycobacterium agents.	2	Prof.Dr/Lobna M. Abdel Aziz
Diuretics (water and osmotic agents, acidifying salts, mercurials , $\alpha,\beta$ unsaturated ketones, purines , pyrimidines)	2	
Diuretics (sulfonamide derivatives and endocrine antagonists)	2	
Final written exam		

**Topics taught as a percentage of the content specified:**

>90%  √  70-90%  <70%

**Reasons in detail for not teaching any topic:**

Because of Corona pandemic and change of assessment method, students' activity through the course was cancelled

**If any topics were taught which are not specified, give reasons in detail:**

**2- Teaching and learning methods:**

Lectures:

√

Practical training/ laboratory:

√

Seminar/Workshop:

-

Class activity: role play

√

Case Study:

√

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Because of Corona pandemic and suspension of the study since 15 March, the lectures and laboratory were delivered to the students through telegram channel.

**3- Course learning outcome assessment:**

Because of Corona Pandemic, the assessment methods were modified according to the descision of Supreme Council of Universities.

The final written exam was replaced by preparation of project in a topic related to the course. Each project objectives were announced to the students through orientation lecture as well as rules for preparation and assessment of the project. After receiving and assessing the projects, feedback about students performance was announced to the students as well. All the projects were evaluated according the the scale of pass or fail and so no marks or grades were recorded.

**List of projects:**

code	List of projects
A	Medicinal Chemistry of alkylating anticancer agents.
B	Medicinal Chemistry of diagnostic agents.
C	Medicinal Chemistry of secretory oral hypoglycemic agents.
D	Medicinal Chemistry of thiazide derivatives as diuretics.
E	Medicinal Chemistry of ACE inhibitors as antihypertensive agents.
F	Medicinal Chemistry of metalating agent in cancer chemotherapy.
G	Medicinal Chemistry of neuraminidase inhibitors as antiviral agents.
H	Medicinal Chemistry of antihyperlipidemic agents.
I	Medicinal Chemistry of non-secretory oral hypoglycemic agents.
J	Medicinal Chemistry of mycolic acid synthesis inhibitors and anti T.B. agents.
K	Medicinal Chemistry of calcium channel blockers as antihypertensive agents.
L	Medicinal Chemistry of carbonic anhydrase inhibitors as diuretics.
M	Medicinal Chemistry of NS5B polymerase inhibitors as antiviral agents.
N	Medicinal Chemistry of folate antagonist as anticancer agents.
O	Medicinal Chemistry of DNA polymerase inhibitors as antiviral agents.
P	Medicinal Chemistry of purine antagonist as anticancer agents.
Q	Medicinal Chemistry of anticoagulants.
R	Medicinal Chemistry of PABA inhibitors as anti T.B..
S	Medicinal Chemistry of pyridine antagonist as anticancer agents.
T	Medicinal Chemistry of loop diuretics.
U	Medicinal Chemistry of vasodilators as antihypertensive agents.
V	Medicinal Chemistry of reverse transcriptase inhibitors as antiviral agents.
W	Medicinal Chemistry of anti-acute anginal drugs.
X	Medicinal Chemistry of anti-chronic anginal drugs.
Y	Medicinal Chemistry of protease inhibitors as antiviral agents.
Z	Medicinal Chemistry of sodium channel blockers as anti-arrhythmic agents.

**Evaluation of course content and final exam :****4- Facilities and teaching materials:**

Totally adequate

-
---

Adequate to some extent

√
---

Inadequate

-
---

List any inadequacies:

- Poor internet and difficulty of lecture download for some students

**5- Administrative constraints:**

Absence of well equipped computer lab with good internet connection and IT technician to help teaching staff if there is any difficulty in preparing and uploading lectures

**6- Student evaluation of the course:**

<b>List any criticism</b>	<b>Response of course team</b>
<p>Generally students were satisfied about the course but they complained from assessment through projects preparation in the following point:</p> <ul style="list-style-type: none"> <li>-No determination of list of references for each project</li> <li>-Not enough time for projects preparation</li> </ul>	<ul style="list-style-type: none"> <li>- Insert preparation of projects as a tool for assessment</li> <li>- Good planning for students projects regarding time, follow up, determination of objectives, references and assessment criteria</li> </ul>

**7- Teaching staff evaluation of online learning and student assessment by projects:**

Generally, staff members were satisfied about online learning but they mentioned problems that students may face like unavailability of computers or weak internet connection

Unavailability of formal platform for the faculty to organize the interaction process with students

Unavailability of teaching studio equipped with audiovisual facilities for recording lectures

## 8- Comments from external evaluator(s):

Due to corona pandemic, external evaluation was unavailable

## 9- Course enhancement:

1. Progress on actions proposed for improving the course in previous course reports (if any).

<b>Action</b>	<b>State whether or not complete &amp; give reasons for any non completion</b>
Providing the students with electronic sources for the courses	<b>Accomplished</b>
Using additional learning and teaching methods such as group discussion to encourage students to interact effectively with lectures	<b>Accomplished</b>

Actions Recommended for Further Improvement	Start Date	Completion Date	Person Responsible
Development of search skills through course assignments	9/2020	6/ 2021	Course instructors

**Course Coordinator: Prof. Dr./ Sobhy M. El-Adl**

**Head of Department: Prof. Dr./ Kamel A. Metwally.**