COURSE REPORTS

Faculty of Pharmacy

Fourth Year – Second Term

2019-2020

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COURSE REPORT

Hospital Pharmacy and Clinical Pharmacy

Fourth year – secondTerm
2019-2020

Annual Course Report of Hospital and clinical pharmacy

University: Zagazig Faculty: Pharmacy Department: Pharmacy practice

Course Report

A- Basic Information

1. Title and code: Hospital pharmacy and Clinical pharmacy code: **PP420**
2. Programme(s) on which this course is given: Bachelor of Pharmacy
3. Year/ Level of programme: 4th year (2nd semester)
4. Units/Credit hours:

Lectures	2	Tutorial/Practical	1	Total	2.5

5. Names of lecturers contributing to the delivery of the course
   i Assis Prof. Gehan Fathy Attia
   ii Dr. Shereen Sabri
   Course co-ordinator: Assis Prof. Gehan Fathy Attia
   External evaluator: Prof. Mohamed Ali Attia Shafae- Assuit University

B- Statistical Information

No. of students attending the course:	No.	970	%	100
No. of students completing the course:	No.	970	%	100

Results:

Passed:	No.	970	%	100	Failed: No.	0	%

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
Orientation to hospital pharmacy	2	Dr. Shereen Sabry
Introduction to hospital pharmacy -Responsibilities of hospital pharmacist	2	
- Pharmacy and therapeutic committee - Hospital formulary	2	
Hospital drug distribution systems	2	Dr. Gehan Fathy
Dispensing process - Dispensing of biotechnology products	2	
Dispensing of radiopharmaceuticals	2	
Dispensing of vaccines dispensing of cytotoxics	2	
Medication errors	4	
Dispensing of controlled drugs	2	
Pharmacovigilance & adverse drug reactions	2	Dr. Shereen Sabry
Rational drug use	2	
IV admixture and TPN	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

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

2- Teaching and learning methods:

Lectures:	**
Practical training/ laboratory:	**
Seminar/Workshop:	-
Class activity:	**
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- Student 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.
The practical exam was electronic exam, where different forms were distributed to different students groups

List of projects:

Teaching staff	**List of projects**
Assis. Prof. Gehan Balata	1.Biotechnology products 2. Hazardous Drugs 3. Medication errors in critical care 4. Medication errors: World Health Organization 5. Medication errors in hospitals: unit dose drug dispensing system versus floor stock distribution system:
Assis. Prof. Shereen sabri	1. Pharmacovigilance 2. Intravenous admixture 3. Total parenteral nutrition 4. Hospitals 5. Hospital formulary 6. Dispensing during off-hours

4- Facilities and teaching materials:

Totally adequate -

Adequate to some extent **

Inadequate -

List any inadequacies

List any difficulties encountered

Poor internet and difficulty of lecture download for some students

6- Student evaluation of the course: Response of course team

List any criticisms

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: No determination of list of references for each project Not enough time for projects preparation	- nsert preparation of projects as a tool for assessment - ood planning for students projects regarding time, references and assessment criteria

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 lecture

7- Comments from external evaluator(s): Response of course team

- The evaluators were satisfied about the course

8- Course enhancement:

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

Actions required	Completion
1- Add handling and dispensing of Biotechnology products and cytotoxic drugs	completed
2- Add simulation lab for developing practice skills	Cancelled due to Corona
3- Cancel hospital visit and change the activity into run an interview with a patient to collect required information for patient profile and then prepare a video for this interview	cancelled due to corona
4- 30% of the final exam questions will be short essay for proper estimation of students achievement of ILOs and to reach normal distribution of grades	change of assessment method

9- Action plan for academic year 2020 - 2021

Actions required	Completion date	Person responsible
1.Add simulation lab for developing practice skills	Sep 2020	Course coordinator
2. 30% of the final exam questions will be short essay for proper estimation of students achievement of ILOs and to reach normal distribution of grades	Sep 2020	Course team

3.Apply blended learning	Sep 2020	Course team
4.Apply electronic exams	Sep 2020	Course team

Signature: Dr. Gehan Fathy

Date: / /

COURSE REPORT

Biotechnology of Natural Product

Fourth year – secondTerm
2019-2020

Passed: No. 971 % 100 Failed: No. 0 % 0

Course Report of Biotechnology of Natural Products

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: PG 426
4. Department offering the course: Pharmacognosy
5. Academic year Level: Fourth year/Second semester

Units/Credit hours:

Lectures 2 Tutorial/Practical 2 Total 3

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

Prof. Samih ElDahmy,

Prof. Rawia zaied,

Prof. Zeinab Ibrahim,

Ass. Prof. Rehab Hamed,

Dr. Rasha Adel.

7. Course coordinator: Prof. Samih El-Dahmy

8. External evaluator: Prof. Ali Mohamed El-Sayed.

B- Statistical Information:

No. of students attending the course: No. 971 % 100

No. of students completing the course: No. 971 % 100

Results:

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**
- Introduction to plant tissue culture - Plasticity and totipotency. - The culture enlivenment. - Plant cell culture media.	6	Prof. Zeinab Ibrahim.
- Plant growth regulators - Culture types - Plant regeneration		
Micropropagation		
- Introduction to plant biotransformation - Biotransformation using plant cells and organ culture. - Pathway transformation.	4	Dr. Rehab Hamid.
- Biotransformation using immobilized cell culture. -Genetic engineering approach towards transformation. - Biotransformation using plant enzymes. - Biotransformation of selected secondary metabolites.		
- Introduction of plant genetics - A natural vehicle for introducing new gene into plant.	6	Dr. Rasha Adel
- Horizontal gene transformation - The Ti plasmid and plant genetic engineering		
- The role of organisms in genetic engineering. - Application and purpose of plant genetic engineering		
- Genetic engineering of biosynthetic enzymes for natural products - Genetically engineered plant fats	4	Prof. Samih El-Dahmy

- Production of candidate vaccines in plant tissue. - Genetic markers for plant breeding (DNA polymorphism)		
-Authentication of components from a mixture of herbal materials by genetic engineering techniques.	4	Prof. Rawia Zaied
- Other purposes of genetic engineering.		

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: [√]

Practical training/ laboratory: [√]

Seminar/Workshop: [ ]

Class activity: [√]

Case Study: [ ]

Other assignments/homework:

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

- Videos for demonstration.
- Activities (internet search about different topics including tissue culture techniques, DNA extraction…etc, then presenting data as a report and presentation).

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:

Teaching staff	List of projects
Prof. Samih El-Dahmy	-|If your college asked you about this problem. What is your advice to him ? -1For the past 4 weeks I have been experiencing the growth of mould in my plant tissue culture plates. I have ensured that I am being "extra clean", I clean the flow hood with 70% ethanol three times. My media preparation is done in sterile conditions under the flow hood. All materials are sent to autoclave prior to use. My forceps are soaked in ethanol prior to the next plate and are flamed each time too. I then tape my petri dish/ boxes with micropore tape, twice. I do not let my hands go over any of the plates when I am using them. I check everyday for contamination and there always appears to be growth on one or two. I'm afraid that I will have no tissue left at this point. -2I am working on one of the flavor molecule producing it through biotechnological route. I have two recombinant genes that are involved in the enzymatic reaction that are transformed in E.coli Bl21. While setting the biotransformation reaction with the substrate along with the whole E.coli cells and lysed cells, whole cells are giving me better conversions as compared to lysed cells. My question is when I am using the fresh whole cells its conversion is less as compared to the cells resuspended in phosphate buffer ph7 and then stored at 4Co (refrigerator) for one two weeks. Why ? --3Does a gene show its expression during callus stage after Agrobacterium transformation ? -4 What are the benefits and disadvantages of transgenic plants ? -5With time, is it conceivable that biopesticides are going to replace (to a large extent) chemical pesticides? -6 Many people are against transgenic plants, do you think that we can nourish an increasing world population without

	them ? -7 Protoplast fusion for crop improvement. -8 Bacterial gene inserted in an engineered RNA virus: efficient expression in monocotyledonous plant cells. -9 Expression of genes transferred into monocot and dicot plant cells by electroporation. 10- What is genetic modification (GM) of crops and how is it done?
Prof. Rawia Zaied	Suggest an example for the identification of medicinal plants by applying one of the following DNA molecular techniques 1-Identification of Medicinal Plants using DNA Sequencing marker 2-Identification of Medicinal Plants using Random Amplified Polymorphic DNA (RAPD). 3-Identification of Medicinal Plants using Sequence Characterized Amplified Region (SCAR). 4-Identification of Medicinal Plants using Restriction Fragment Length Polymorphism (RFLP) 5-Identification of Medicinal Plants using Amplified Restriction Fragment Length Polymorphism (AFLP).
Prof. Zeinab Ibrahim	1-Scopes of Plant tissue culture 2-Sterilization techniques are applied in vitro culturing of plants. 3-Different growth medium_that capable of sustaining cell survival and growth in plant tissue culture. 4-Plant growth regulator (PGR). 5-Cell suspension culture . 6-Roles of elicitors to improve the biosynthesis of specific compounds. 7-Micropropagation . 8-Somatic embryogenesis. 9-Androgenesis .
Assis. Prof. Rehab Hamed	Dicuss one of these topics with examples 1-Techniques of biotransformation 2- Biotransformation Pathway 3- Biotransformation using plant enzymes 4- Factors affecting biotransformation 5- Application of biotransformation on production of natural products
Dr. Rasha Adel	1-Heterologous gene expression in plants (concept, methods, applications)

	2-Applications on Agrobacterium mediated transformation in the production of secondary metabolites 3-Applications on Arabidopsis transformation using floral dip method in the production of secondary metabolites 4- Compare between different victorless methods of genetic transformation in plants showing advantages and drawbacks of each method.

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 lecture.

6- Student evaluation of the course:

The number of students participate in the student questionnaire is not representative (0.6% of total number of students)

7- Comments from external evaluator(s):

Comments	Response of course team
- Course aims are very clear and linked to program aims - Course topics are recent. - Student assessment methods are suitable.	- - -

8- Course Enhancement:

Action required	State whether or not complete to give reasons for any non completion
- Addition of other activities to enhance the students to develop self-learning abilities.	Complete
- Contextualization of the course at the beginning of the course.	Complete

9- Action plan for academic year 2020– 2021:

Action required	Completion date	Person responsible
Addition of new topics related to production of natural products using advanced techniques of molecular biology	2020/2021	- Course team.
Holding electronic exams	2020/2021	- Course team. - Faculty administration

Course Co-coordinator: Prof. Dr. Samih El-Dahmy

Signature:

Date: / /2020

COURSE REPORT

Clinical Biochemistry 2

Fourth year – secondTerm
2019-2020

Course Report of **Clinical Biochemistry 2**

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: BC 423
4. Department offering the course: Biochemistry
5. Academic year Level: Fourth year / Second term

Units/Credit hours:

Lectures 2 Practical 1 Total 3

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

Ass. Prof. Nahla Younis

Dr. Rana Gamal

Dr. Gehad Elnaggar

6. Course coordinator: *Ass. Prof.* Nahla Younis

7. External evaluator: *Prof.* Mammdouh El-Shishtawi (Mansoura University)

B- Statistical Information:

No. of students attending the course: No. 977 % 100

No. of students completing the course: No. 977 % 100

Results:

Passed: 977 No. 100 % Failed: No. 0 % 0 %

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
- Organ biology (liver)	2	Ass.Prof. Nahla Younis
-Organ biology (kidney and heart). -Gastrointestinal tract.	6	Dr. Rana Gamal
-Blood function and composition - Anemia	8	Dr. Gehad Elnaggar
- Urine analysis -Genetic testing	8	

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:	√
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

Teaching staff	**List of projects**
***Ass. Prof.* Nahla Younis**	Topic 1 : Pancreatic carcinoma Topic 2 : Colorectal carcinoma Topic 3: Bronchogenic carcinoma. Topic 4: Prostate cancer. Topic 5: Polycyctic ovary syndrome. Topic 6: Brain and spinal cord cancers. Topic 7: Breast cancer. Topic 8: Hepatocellular carcinoma. Topic 9: Osteosarcoma. Topic 10: Wilms tumor. Topic 11: Lymphoma. Topic 12: Rehumatoid arthritis. Topic 13: Hemophilia. Topic 14: Multiple myeloma. Topic 15: Multiple sclerosis. Topic 16:Leukemia.
***Dr*. Gehad Elnaggar**	Topic 1 : Diffriential diagnosis of the different studied anemia. Topic 2 : Mineral difficient anemia. Topic 3: Hodgkin´s disease. Topic 4: Favism. Topic 5: Sport anemia. Topic 6: Fanconi anemia. Topic 7: Sideroblastic anemia. Topic 8: Congenital dyserythropoietic anemia. Topic 9: Diamond- blackfan anemia. Topic 10: Cystic fibrosis. Topic 11: Fragile X syndrome. Topic 12: Fabry disease. Topic 13: Y chromosome infertility. Topic 14: Huntington´s disease.

	Topic 15: Marfan syndrome. Topic 16: Alzheimir´s disease. Topic 17: Ovarian cancer. Topic 18: Urethral cancer.

Evaluation of course content and final exam:

4- Facilities and teaching materials:

Totally adequate	-
Adequate to some extent	√
Inadequate	-

List any inadequacies:

Internet was not available in addition to the difficulty of lecture download for some students

5- Administrative constraints:

Limited access to well-equipped computers with good internet connection

6- Student evaluation of the course:

List any criticism	Response of course team
• he allowed time for performing the research is short.	• tudents should organize their time to perform their duties at the exact time; also lectures were committed with specific time.
Unavailability of good internet for some students.	This point will be taken in consideration.
E-learning should not replace traditional ones	There is no intention to replace traditional learning by e-learning. Both go side by side to achieve our target
There should be more online communication between students and lectures/ Unavailability of direct contact between students and lecturers	More interactive online learning will be planned for the next year. Some communication was available either through the official page of the Biochemistry department or e-mails of staff members announced for students in the orientation lectures. Few staff announced their contact numbers as well.

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

Unavailable official platform to upload lectures and to evaluate students through more confidential and easily accessed procedures

8- Comments from external evaluator(s):

Well structured course design

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
Measurements of course ILOs.	Completed	Completed	Course ILOs was measured through assessing the student's research.

Actions Recommended for Further Improvement	Start Date	Completion Date	Person Responsible
Increase the interaction between students and lecturers.	2020-2021	2020-2021	Course team
Official platform to upload materials, interact and evaluate students	2020-2021	2020-2021	Faculty and course team
Offering student an alternative way to lectures due to difficulties they face in downloading and saving videos	2020-2021	2020-2021	Faculty and course team
More assignments and activities to train students to mange time and prepare research project in proper time frame	2020-2021	2020-2021	Course team

Course Coordinator: *Ass. Prof.* Nahla Nabil Younis

Signature:

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

Signature:

Date: Course report was approved in department council on

COURSE REPORT

Bioassay 2

Fourth year – secondTerm
2019-2020

COURSE REPORT

Toxicology 2

Fourth year – secondTerm
2019-2020

Course Report of Toxicology II

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

A- Basic Information:

1. Title and code: Toxicology II PT427

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

3. Year/ Level of programme: Fourth year (second semester)

4. Units/Credit hours:

Lectures	2 hrs	Tutorial/Practical	2 hr	Total	3 hrs

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

- **Prof.Dr/ Salah Gharieb**
- **Dr / Noura Ahmed**
- **Dr/Nesreen Ibrahim**

6. Course coordinator: Prof.Dr/ Salah Gharieb

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

B- Statistical Information:

No. of students attending the course:	No.	981	%	100	
No. of students completing the course:	No.	980	%	99.9	
Results:					
Passed:	No. 980	%	99.9	Failed: No.	1 % 0.1

C- Professional Information:

1 - Course teaching:

Topics actually taught	No. of hours	Lecturer
Introduction to anti-microbial	1	• **Prof.Dr/Salah Ghareib** • **Dr/Noura Ahmed** • **Dr/Nesreen Ibrahim**
Antimicrobial therapy	3	
Antiviral drugs	2	
Antifungal drugs	1	
Anthelmintics	1	
Antiprotozoals	1	
Anticancer drugs	3	
Teratogenicity	1	
Revision	1	
open discussion	1	

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(on line):	√
Practical training/ laboratory:	√
Seminar/Workshop:	-
Class activity:	-
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:

Teaching staff	**List of projects**
Prof.Dr. Salah Garieb	Doxycycline, amikacin, ampicillin, amoxycilline, cefotaxime, ceftriaxone, cloxacilline,cefclor,Streptomycine, Sulfamethoxazole, Teicoplanin.
Dr. Noura ahmed	Efavirine, efavirenz, ritonavir, nystatin, acyclovir, maraviroc, foscarnet, amivudine, pyrantel , Ivermectin, Niclosamide.
Dr. Nesreen Ibrahim	Tamoxifin, rituximab, paclitaxel, docetaxel, iodoquionol, tacrolimus, erythropoetin , metronidazole, suramin, melarsoprol, quinidine, atovaquone.

List of proposed topic of research for each drug :

- **Drug class &sub class**
- **Pharmacokinetics**
- **Mechanism of action**
- **Therapeutics, uses, indications**
- **Containdications**
- **Toxic dose**
- **Therapeutic dose**
- **Side effects**
- **Drug-Drug interaction**
- **Trade names**

Members of examination committee:

- **Prof.Dr/ Salah Gharieb**
- **Dr / Noura Ahmed Hassan**
- **Dr/Nesreen Ibrahim**

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
-students were satisfied	

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
Using additional learning and teaching methods such as group discussion to encourage students to interact effectively with lecturers	Has been performed		
Using simulated video and computer aided learning in practical sessions	Not completed		

Supply the labs with data show and black-out curtains to facilitate teaching.	Has been performed		

2. Action Plan for Next Semester/Year				
Actions Recommended for Further Improvement	Intended Action Points (should be measurable)	Start Date	Completion Date	Person Responsible
Development of search skills through course assignments			2020-2021	- Course team.
Organizing field visits to the university hospitals			2020-2021	- Course team.
Calling the library to save "Textbook of Modern Toxicology" as an important reference book.			2020-2021	- Course team.
Activating the faculty council decision by adopting a new mechanism for oral exam and using balanced question cards			2020-2021	- Course team.
Measurement of ILOS of course			2020-2021	- Course team.

Signature:

Date: / /

COURSE REPORT

Medicinal Chemistry-4

Fourth year – secondTerm
2019-2020

Course Report of **Medicinal Chemistry-4**

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: MC423
4. Department offering the course: **Medicinal Chemistry**
5. Academic year Level: fourth year /Second term

Units/Credit hours:

Lectures 2 Practical 2 Total 3

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

- Prof.Dr./ Mohamed El-hussieny Elsadek
-Prof.Dr./ Mohamed Baraka
-prof.Dr./Osama Elsabbagh
-Assist.Prof.Dr./ Samy Megahed Ibrahim
-Assist.prof.Dr./Hend Kothayer
-Dr. samer Albarmawi

6. Course coordinator: prof.Dr./Osama Elsabbagh

7. External evaluator: …….

B- Statistical Information:

No. of students attending the course: No. 973 % 100

No. of students completing the course: No. 973 % 100

Results:

Passed: 973 No. 100 % Failed: No. 0 % 0 %

C- Professional Information:

1 - Course teaching:

Topics actually taught	No. of hours	Lecturer
Steroidal hormones -Nomenclature of Steroids -Female sex hormones (estrogenic agents) -Nonsteroidal anti-estrogenic agents -aromatase inhibitor	2	Prof.Dr./ Mohamed El-hussieny Elsadek
-Female sex hormones (progesterone derivatives), oral contraceptives -Androgens& anti-androgenic agents	2	
-Anabolic Agents - -Mineralocorticoids and Glucocorticoids	2	prof.Dr./Osama Elsabbagh
-Drug Metabolism -Functionalization reaction (phase I)	2	Assist.Prof.Dr./ Samy Megahed Ibrahim & Assist.prof.Dr./Hend Kothayer
-Conjugation reactions (phase II)	2	
-Factors affecting drug metabolism) -Introduction in Drug design	2	
-Development of drugs -Drug Latentiation	2	
-Physicochemical factors & Drug receptor-interaction	2	
-Antihistaminics (H1-antagonists)	2	Prof.Dr./ Mohamed Baraka
-Antiulcer Drugs (H2-antagonists,proton pump inhibitors & prostaglandins)	2	
-Vitamins Lipid-soluble vitamins (A,D,E&K)	2	prof.Dr./Osama Elsabbagh & Dr. samer Albarmawi
-Water-soluble vitamins (vitamin B_1,B_2,B_3)	2	
-Folic acid , Vitamin B_{12} &Vitamin C	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 vitamin A.
B	Medicinal Chemistry of vitamin D.
C	Medicinal Chemistry of vitamin E.
D	Medicinal Chemistry of glucocorticoids with very little or no salt

	retention.
E	Medicinal Chemistry of inhalation and intranasal glucocorticoids.
F	Medicinal Chemistry of different types of drug targets.
G	Medicinal Chemistry of sources of lead compounds in drug discovery.
H	Medicinal Chemistry of binding forces in drug target interaction.
I	Medicinal Chemistry of drug design-optimization binding interactions.
J	Medicinal Chemistry of drug design-optimization pharmacokinetic properties.
K	Medicinal Chemistry of esterogenic agents.
L	Medicinal Chemistry of antiesterogenic agents.
M	Medicinal Chemistry of progestrons.
N	Medicinal Chemistry of androgenic agents.
O	Medicinal Chemistry for first generation antihistaminics.
P	Medicinal Chemistry for second and third generation antihistaminics.
Q	Medicinal Chemistry for H2-blockers antihistaminics.
R	Medicinal Chemistry for proton pump inhibitors.
S	Medicinal Chemistry for role of CYP-450 enzymes and drug metabolism.
T	Medicinal Chemistry for role of drug metabolism in drug discovery.
U	Medicinal Chemistry for effects of metabolic enzymes in drug-drug interactions.
V	Medicinal Chemistry aspects of drug metabolism and pharmacokinetics.
W	Medicinal Chemistry aspects of phase II metabolism.
X	Medicinal Chemistry of thiamine hydrochloride (vitamin B1).
Y	Medicinal Chemistry of vitamin B6.
Z	Medicinal Chemistry of folic acid.

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:

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: -No determination of list of references for each project -Not enough time for projects preparation	- nsert preparation of projects as a tool for assessment - ood planning for students projects regarding time, follow up, determination of objectives, references and assessment criteria

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):

Because of corona pandemic, external evaluation was unavailable

9- Course enhancement:

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

Action	State whether or not complete & give reasons for any non completion
Providing the students with electronic sources for the courses	**Accomplished**
Modifying the course specification for more correlation between ILOs and course objectives	**Accomplished**

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. Osama El-Sabbagh**
- **Head of department:Prof.Dr. Kamel A. Metwally**

COURSE REPORT

Biotechnology

Fourth year – secondTerm
2019-2020

Course Report of Biotechnology

University: Zagazig **Faculty:** Pharmacy **Department:** Microbiology & Immunology

A- Basic Information:

1. Title and code: Biotechnology / **MI424.**

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

3. Year/ Level of programme: Fourth level (Second semester).

4. Units/Credit hours:

Lectures	Tutorial/Practical	Total
2 hrs	-	2 hrs

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

Prof. Dr. Fathy El-Sayed Serry

Prof. Dr. Ashraf Kadry.

6. Course coordinator: Prof. Dr. Fathy Serry.

7. External evaluator: Prof. Dr/ Abdel Gawad Mohamed Hashem.

B- Statistical Information:

No. of students attending the course: No. 983 % 100

No. of students completing the course: No. 983 % 100

Results:

Passed: No. 983 % 100 Failed: No. - % -

Grading of successful students:

Excellent: No. - % - Very Good: No. - % -

Good : No. - % - Pass: No. 983 % 100

C- Professional Information:

1 - Course teaching:

Topics actually taught	No. of hours	Lecturer
Traditional biotechnology and its applications	10	**Prof. Dr. Fathy Serry**
Gene cloning and recombinant DNA technology	8	
Production of human proteins • Chemical synthesis of DNA • DNA sequensing	4	
Applications of recombinant DNA technology	4	**Prof Dr. Ashraf Kadry**
Important Molecular biology techniques PCR DNA sequencing DNA Microarray	4	

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:		✓
Practical training/ laboratory:		–
Seminar/Workshop:		-
Class activity:		✓
Case Study:		-
Other assignments/homework:		✓

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

Because of the recent outbreak of COVID-19 and the consequent suspension of the study since 15 March, remaining lectures and practical sessions were uploaded on telegram channel to be available to all students .

3- **Student 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 scale of pass or fail and so no marks or grades were recorded.

The assigned topics as projects included 30 topics as listed:

1. **Recombinant DNA technology**
2. **Specialized (restricted) transduction as natural recombination**
3. **Types and roles and uses of Vectors (or cloning vehicle) used in recombinant DNA**
4. **Obtaining the target genes used in recombinant technology**
5. **Application of Genetic recombination (engineering) in medicine**
6. **Application of Genetic recombination (engineering) in Agriculture**
7. **Application of Genetic engineering in Bioremediation**
8. **PCR Technology**
9. **Application of PCR**
10. **Monoclonal antibody technology**
11. **Application of monoclonal antibodies in therapy**
12. **Stem cells and regenerative medicine**
13. **DNA sequencing**
14. **Application of DNA sequencing**
15. **Microarray assay**
16. **Application of Microarray assay**
17. **Historical review of biotechnology**
18. **Upstream processes in fermentation**
19. **Types of bioreactors**
20. **Industrial microbial strains**
21. **Fermentation products**
22. **Sources of antibiotics**
23. **Biotransformation**
24. **Manufacture of immunological products**
25. **Microorganisms as source of organic acids**
26. **Microorganisms as source of amino acids**
27. **Microorganisms as source of organic solvents**
28. **Fermentation of vitamins**
29. **Microbial enzymes in medicine and pharmacy**
30. **biopharmaceuticals**

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:

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 points : - no follow up from some staff member -absence of assigned reference list for each project -allowed time for projects preparation wasn't enough	- Insert preparation of projects as a tool for assessment. -Good planning for students projects regarding time, follow up, determination of objectives, references and assessment criteria

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 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	Addressing faculty dean to enhance internet services	Students are satisfied	
Text books for the course in the library are not sufficient and difficult to be borrowed from the library	Calling faculty administration to provide the library 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	Students are satisfied	Sustainment of action is required

10- Action plan for academic year 2020-2021

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/ Fathy Serry

Head of Department: Prof. Dr. Nehal Elsayed Youssef

تم اعتماد ومناقشة تقرير المقررات من مجلس القسم بتاريخ 2020/9/23