



## **Department of Pharmaceutical Chemistry**

### **A summary about the Department of Pharmaceutical Chemistry**

It is one of the departments of the Faculty of Pharmacy, Tabuk University, which contributes to teaching, scientific research and management of the college.

### **Department Vision**

Achieving international standards in pharmaceutical education and scientific research and contributing to community service.

### **Department Mission**

Providing the student with the knowledge, skills, and competencies of pharmaceutical organic chemistry, pharmaceutical analytical chemistry, pharmaceutical biochemistry as well as medical chemistry. In addition to carrying out basic and applied research to solve society problems in order to achieve the college's mission.



## Department of Pharmaceutical Chemistry

**The Department of Pharmaceutical Chemistry aims to:**

- 1) Prepare students to practice pharmacy by teaching basic and applied pharmaceutical chemistry. Which include pharmaceutical organic chemistry, pharmaceutical chemistry, pharmaceutical analytical chemistry, pharmaceutical and clinical biochemistry, and drug design.
- 2) Conducting research supported by the university and other outside the university in the field of specialization and in the laboratories of the department and the college.
- 3) Providing awareness and consulting services to the community.

### **Courses taught in the Department of Pharmaceutical Chemistry**

entry	Course code	Course title	Units
<b>Compulsory</b>			
1	PDPC211	Pharmaceutical Organic Chemistry-1	3
2	PDPC212	Pharmaceutical Organic Chemistry-2	3
3	PDPC221	Pharmaceutical Analytical Chemistry	4
4	PDPC231	Pharmaceutical Biochemistry	4
5	PDPC341	Introductory Medicinal Chemistry	3
6	PDPC342	Medicinal Chemistry-1	3
7	PDPC443	Medicinal Chemistry-2	3
8	PDPC432	Clinical Biochemistry	3
<b>Elective</b>			
9	PDPC0501	Molecular drug design	2
10	PDPC0402	Scientific writing and presentation	2
		Total	30



## Department of Pharmaceutical Chemistry

### The operational plan to achieve the objectives and mission of the Department of Pharmaceutical Chemistry 1439/1440

The faculty members of the department implement the plan of the Department of Pharmaceutical Chemistry as follows:

Implementation period	Responsible / Coordinator	Steps of Execution	Activities	Goals	
First and second semesters of the academic year 1443 (2 <sup>nd</sup> Year Students)	Dr. Nader Abo-Dya	<b>Teaching Pharmaceutical Organic Chemistry Courses (1-2)</b>	<b>Teaching courses</b>	<b>Goal number 1:</b> 1) Prepare students to practice pharmacy by teaching basic and applied pharmaceutical chemistry. Which include pharmaceutical organic chemistry, pharmaceutical chemistry, pharmaceutical analytical chemistry, pharmaceutical and clinical biochemistry, and drug design.	-1
First semester of the academic year 1443 (2 <sup>nd</sup> Year Students)	1. Dr. Nehal Mohsen 2. Dr. Heba Alhousini 3. Dr. Nehal Mohsen	<b>Teaching Pharmaceutical Analytical Chemistry Course)</b>			
First semester of the academic year 1443 (3 <sup>rd</sup> Year Students)	1. Dr. Kamel Metwally 2. Dr. Heba Alhousini	<b>Teaching Introduction to Medicinal Chemistry</b>			
Second semester of the academic year 1443 (3 <sup>rd</sup> Year Students)	3. Dr. Nehal Mohsen	<b>Teaching courses Medicinal Chemistry -1</b>			



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First semester of the academic year 1443 (4 <sup>th</sup> Year Students)		<b>Teaching courses Medicinal Chemistry-2</b>			
Second semester of the academic year 1443 (2 <sup>nd</sup> Year Students)	<ol style="list-style-type: none"> <li>1. Prof. Mohammed Al-Gayyar</li> <li>2. Dr. Heba Elhouseni</li> <li>3. Dr. Nehal Mohsen</li> </ol>	<b>Teaching courses Pharmaceutical Biochemistry</b>			
First semester of the academic year 1443 (4 <sup>th</sup> Year Students)	<ol style="list-style-type: none"> <li>1. Prof. Mohammed Al-Gayyar</li> <li>2. Dr. Heba Elhouseni</li> <li>3. Dr. Nehal Mohsen</li> </ol>	<b>Teaching courses Clinical Biochemistry</b>			
First semester of the academic year 1443 (5 <sup>th</sup> Year Students)	<ol style="list-style-type: none"> <li>1. Dr. Heba Elhouseni</li> <li>2. Dr. Nehal Mohsen</li> </ol>	<b>Teaching Scientific writing and presentation</b>			
Second semester of the academic year 1443 (5 <sup>th</sup> Year Students)	<ol style="list-style-type: none"> <li>1. Dr. Kamel Metwally</li> <li>2. Dr. Nader Abo-Dya</li> <li>3. Dr. Heba Elhouseni</li> <li>4. Dr. Nehal Mohsen</li> </ol>	<b>Research Project</b>			



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Academic year 2021-2022	1. Dr. Kamel Metwally	Apply for funding for research project 1*	<b>2.1. Application for university funding for research</b>	<b>The second goal: To carry out research supported by the university and others outside the university in the field of specialization and in the department and college laboratories.</b>	-2		
Academic year 2021-2022	2. Dr. Nehal Mohsen	Apply for funding for research project 2*					
Academic year 2021-2022	3. Dr. Nader Abo- Dya	Apply for funding for research project 3*					
Academic year 2021-2022	1. Dr. Kamel Metwally 2. Dr. Nader Abo- Dya 3. Prof. Dr. Mohammed Al- Gayyar 4. Dr. Heba Elhouseni 5. Dr. Nehal Mohsen	Conducting laboratory research and research writing and dissemination	<b>2.2. Conduct research</b>				
Academic year 2021-2022	1. Dr. Nehal Mohsen	Publishing the work	<b>2.3 Finalizing projects from previous years</b>				
Academic year 2021-2022	1. Dr. Kamel Metwally 2. Dr. Nader Abo- Dya 3. Prof. Dr. Mohammed Al- Gayyar 4. Dr. Heba	Participation in implementation of the plan college activities for the academic year 1443H	<b>Implementation of awareness campaigns and workshops</b>			<b>Providing community awareness and counseling services.</b>	-3



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	Elhouseni 5. Dr. Nehal Mohsen				
Academic year 2021-2022	1. Dr. Kamel Metwally 2. Dr. Nader Abo-Dya 3. Prof. Dr. Mohammed Al-Gayyar 4. Dr. Heba Elhouseni 5. Dr. Nehal Mohsen	Implementation of curricular activities			
Academic year 2021-2022	6. Dr. Kamel Metwally 7. Dr. Nader Abo- Dya 8. Prof. Dr. Mohammed Al- Gayyar 9. Dr. Heba Elhouseni 10. Dr. Nehal Mohsen	Presentation of Workshops and awareness lectures			



## Department of Pharmaceutical Chemistry

### **Research plan of the Department of Pharmaceutical Chemistry**

The members of the Department of Pharmaceutical Chemistry conduct a number of scientific researches as an essential part of their duties. They focus on research that provides direct benefit to the surrounding community. Accordingly, the Department of Pharmaceutical Chemistry has a research plan based on several axes:

A. Design, construction and testing of some new organic compounds as part of the Department's involvement in the development of national medicines in the areas of:

1. Antibiotics
2. Antibiotics of microbial membranes
3. Antidepressants
4. Anti-inflammatory

B. Study of the reasons and modern methods of treatment as well as the mechanics of the work of some treatments related to some diseases of interest in the surrounding community, such as:

1. Cancer
- 2 - Diabetes mellitus complications.
- 3 - Diseases of the liver.

C. Developing new methods for detecting drugs and toxins.

D. Studying the effectiveness of some natural substances against a number of diseases on experimental animal models.

E. Cooperation with other scientific departments in the faculty or from outside the college to achieve maximize the research benefits:

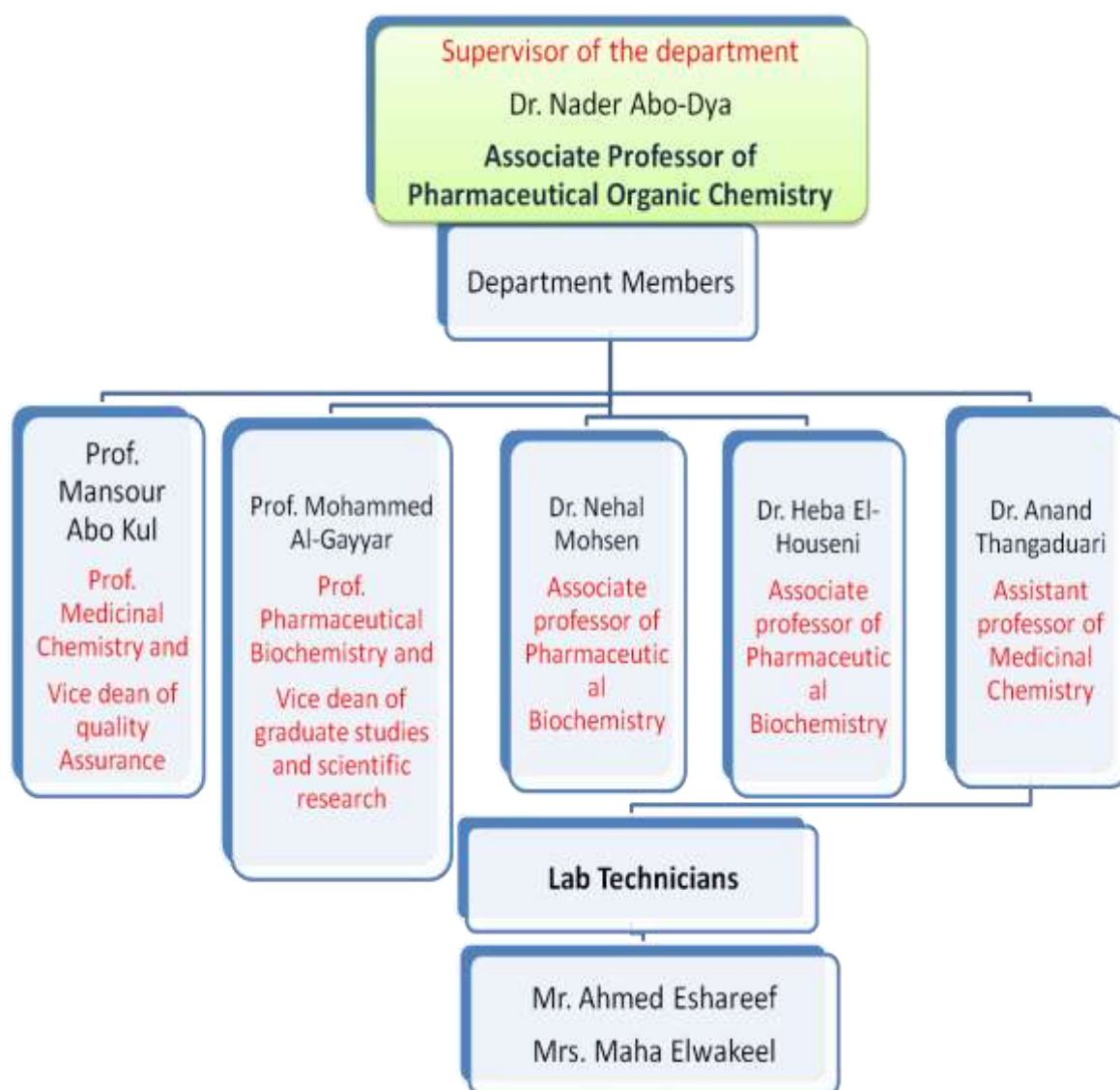
F. Evaluation of the therapeutic effect of certain natural substances and their synthetic derivatives.

G. Collaboration with the pharmacology and toxicology Department to assess the effect of some new chemical entities against some diseases.



## Department of Pharmaceutical Chemistry

### Structure of the Pharmaceutical Chemistry Department







## Department of Pharmaceutical Chemistry

<p>Dr. Nader Al-Maghawari Mustafa Abo-Dya Associate Professor of Pharmaceutical Chemistry.</p>	<p>Department Supervisor</p>
<p>Prof. Dr. Kamel Metwally Prof. of Medicinal Chemistry</p>	<p>Department Members:</p>
<p>Prof. Dr. Mohammed Al-Gayyar Prof. Pharmaceutical Biochemistry and Vice dean of graduate studies and scientific research</p>	
<p>Dr. Heba El-Houseni Associate professor of Pharmaceutical Biochemistry</p>	
<p>Dr. Nehal Mohsen Associate professor of Pharmaceutical Biochemistry and supervisor of the department-female section</p>	
<p>Abdullah M. Alwagdani, PharmD Lecturer of Pharmaceutical chemistry</p>	
<p>No</p>	
<p>Mr. Ahmed Eshareef Mrs. Maha Elwakeel Mrs. Maram Alemam</p>	<p>Secretary</p>
	<p>Lab Technicians</p>



## Department of Pharmaceutical Chemistry

### Job Description of the Department of Pharmaceutical Chemistry:

#### Job title:

#### Department Supervisor

#### Summary of Position:

Supervising scientific and administrative affairs in the department within the limits of the policies prescribed by Higher Education System.

#### Main tasks:

1. To distribute lectures, lessons and other university work to faculty members in the department for approval the department council.
2. Participate in the proposal of the scientific research plan and joint research department to be approved by department council.
3. Follow up the implementation of decisions and policy of the Council of the Department and the College Council.
4. Supervising the employees of the department and following up their work.
5. Participate in the preparation of the department's report at the end of each university year.

#### Job title:

Faculty Members (Professor - Associate Professor - Assistant Professor)

#### Summary of Position:

To conduct teaching and education for students and supervise the implementation of the policies and decisions agreed upon by the department council.

#### Main duties

1. deliver lessons, lectures and scientific exercises.



## **Department of Pharmaceutical Chemistry**

- 2. Contribute to the conduct of innovative research and studies.**
- 3. Supervision of laboratories and libraries.**
- 4. Adhering to the authentic university traditions and values and working on transmitting them to the students.**
- 5. Establishing and strengthening direct contact with students through academic guidance.**
- 6. Keeping the system inside classrooms, lectures and laboratories.**
- 7. Submit an annual report on his teaching and scientific activities to the department council.**
- 8. Participation in the work of councils and committees.**
- 9. Participate in the work of the scientific conferences and carry out the work of correcting the theoretical exams and supervising the review process results control.**
- 10. Supervising some student activities**

### **Technicians**

#### **Summary of Position:**

The technicians shall cooperate in the educational process according to the policies and decisions agreed upon by the department council.

#### **Main tasks:**

1. Coordination with members of the teaching staff to prepare and equip laboratories.
2. Paste security and safety signs in laboratories.
3. Supervise inventory of chemicals and glass in laboratories and write deficiencies.
4. Arranging and indexing chemicals, glassware and devices in laboratories.
5. Reporting malfunctions.
6. Follow-up cleaning of laboratories