

## 6.

## Scientific Departments Courses in the Faculty of Pharmacy and Drug Technology

Each department in the faculty scientifically supervises a group of courses that belong to its field of specialization. The department is responsible to develop the course specs and follow up the reports and files of these courses.

### 31 Department of Pharmaceutical Chemistry

This department scientifically supervises the following group of courses:

Course Code	Course Name	Lec.	Lab.	Sum	Credit Hours		
3100	General and Physical Chemistry	2	2	4	3		
3101	Organic Chemistry 1	3	2	5	4		
3111	Organic Chemistry 2	2	2	4	3		
3112	Analytical Chemistry 1	2	2	4	3		
3122	Analytical Chemistry 2	2	2	4	3		
3132	Instrumental Analysis	2	2	4	3		
3153	Medicinal Chemistry 1	2	2	4	3		
3163	Medicinal Chemistry 2	2	2	4	3		
3192	Quality Control	1	2	3	2		
3193	Drug Design and Discovery	1	0	1	1		
<b>No. of Courses in the Department: 10</b>		<b>Partial Sum:</b>		<b>19</b>	<b>18</b>	<b>37</b>	<b>28</b>

### 32 Department of Pharmacognosy and Medicinal Plants

This department scientifically supervises the following group of courses:

Course Code	Course Name	Lec.	Lab.	Sum	Credit Hours		
3200	Botany	2	2	4	3		
3211	Pharmacognosy 1	2	2	4	3		
3221	Pharmacognosy 2	2	2	4	3		
3232	Phytochemistry 1	2	2	4	3		
3242	Phytochemistry 2	2	2	4	3		
3253	Quality Control of Herbal Drugs	2	2	4	3		
3274	Phytotherapy	1	2	3	2		
3276	Plant Biotechnology	2	2	4	3		
3285	Drug Design of Natural Products	1	0	1	1		
3286	Complementary and Alternative Medicine	2	2	4	3		
3296	Production of Medicinal Plants	2	2	4	3		
<b>No. of Courses in the Department: 11</b>		<b>Partial Sum:</b>		<b>20</b>	<b>20</b>	<b>40</b>	<b>30</b>

### 33 Department of Pharmaceutics and Pharmaceutical Technol

This department scientifically supervises the following group of courses:

Course Code	Course Name	Lec.	Lab.	Sum	Credit Hours		
3300	Pharmacy orientation	1	0	1	1		
3311	Physical Pharmacy	2	2	4	3		
3322	Pharmaceutics 1	2	2	4	3		
3332	Pharmaceutics 2	2	2	4	3		
3342	Pharmaceutics 3	2	2	4	3		
3353	Biopharmaceutics and Pharmacokinetics	2	2	4	3		
3374	Industrial Pharmacy	2	2	4	3		
3377	Pharmaceutical Technology 1	2	2	4	3		
3378	Cosmetics 1	2	2	4	3		
3385	New Drug Delivery Systems	2	2	4	3		
3387	Pharmaceutical Technology 2	2	2	4	3		
3388	Cosmetics 2	2	2	4	3		
3396	Drug Quality Assurance	1	0	1	1		
3397	Pharmaceutical Technology 3	2	2	4	3		
3398	Quality Control for Cosmetics	2	2	4	3		
<b>No. of Courses in the Department: 15</b>		<b>Partial Sum:</b>		<b>28</b>	<b>26</b>	<b>54</b>	<b>41</b>

### 34 Department of Pharmacology and Toxicology

This department scientifically supervises the following group of courses:

Course Code	Course Name	Lec.	Lab.	Sum	Credit Hours		
3400	Human Anatomy and Histology	2	2	4	3		
3401	Medical Terminology	2	0	2	2		
3412	Human Physiology	2	0	2	2		
3443	Pharmacology 1	2	2	4	3		
3453	Pharmacology 2	2	2	4	3		
3463	Pharmacology 3	2	2	4	3		
3473	Toxicology and Forensic Medicine	2	2	4	3		
3483	Pharmaceutical Biostatistics	1	0	1	1		
3494	First Aid	1	0	1	1		
<b>No. of Courses in the Department: 9</b>		<b>Partial Sum:</b>		<b>16</b>	<b>10</b>	<b>26</b>	<b>21</b>

### 35 Department of Biochemistry and Biotechnology

This department scientifically supervises the following group of courses:

Course Code	Course Name	Lec.	Lab.	Sum	Credit Hours
3520	General Biology	2	0	2	2
3531	Biochemistry 1	2	2	4	3
3541	Biochemistry 2	2	2	4	3
3551	Clinical Biochemistry	2	2	4	3
3552	Pharmaceutical Biotechnology 1	2	0	2	2

3562	Pharmaceutical Biotechnology 2	2	0	2	2		
3573	Ethics of Biotechnology	2	2	4	3		
3583	Biotechnological Drug Design	2	2	4	3		
3593	Biotechnological Drug Production	2	2	4	3		
<b>No. of Courses in the Department:</b>	<b>9</b>	<b>Partial Sum:</b>		<b>18</b>	<b>12</b>	<b>30</b>	<b>24</b>

### 36 Department of Microbiology and Public Health

This department scientifically supervises the following group of courses:

Course Code	Course Name	Lec.	Lab.	Sum	Credit Hours		
3620	Microbiology and Immunology	3	2	5	4		
3630	Pharmaceutical Microbiology	2	2	4	3		
3640	Medical Microbiology	2	2	4	3		
3681	Public Health	2	2	4	3		
<b>No. of Courses in the Department:</b>	<b>4</b>	<b>Partial Sum:</b>		<b>9</b>	<b>8</b>	<b>17</b>	<b>13</b>

### 37 Department of Pharmacy Practice

This department scientifically supervises the following group of courses:

Course Code	Course Name	Lec.	Lab.	Sum	Credit Hours		
3720	Pharmacy Management	2	0	2	2		
3731	Research Methodology	1	0	1	1		
3752	Pharmacy Legislation	1	0	1	1		
3763	Health Care Systems	1	0	1	1		
3764	Pharmacy Practice 1	2	2	4	3		
3765	Pharmacotherapy 1	2	2	4	3		
3774	Pharmacy Practice 2	2	2	4	3		
3775	Pharmacotherapy 2	2	2	4	3		
3776	Pharmacotherapy 4	2	2	4	3		
3777	Pharmaceutical Marketing	2	2	4	3		
3778	Practice in Community Pharmacy	0	4	4	2		
3781	Pharmacoeconomics	2	0	2	2		
3785	Pharmacotherapy 3	2	2	4	3		
3786	Pharmacotherapy 5	2	2	4	3		
3787	Sales and Budget Management	2	2	4	3		
3788	Practice in Pharmaceutical Industry	0	4	4	2		
3789	Graduation Project Part 1	0	2	2	1		
3796	Pharmacy Skills	2	2	4	3		
3796	Clinical Trials	1	2	3	2		
3797	Pharmaceutical Marketing Skills	2	2	4	3		
3798	Professional Experience in Hospitals	0	4	4	2		
3799	Graduation Project Part 2	0	2	2	1		
<b>No. of Courses in the Department:</b>	<b>22</b>	<b>Partial Sum:</b>		<b>30</b>	<b>40</b>	<b>70</b>	<b>50</b>
<b>No. of Courses in the Faculty:</b>	<b>80</b>	<b>Total:</b>		<b>140</b>	<b>134</b>	<b>274</b>	<b>207</b>

## 7.

# Study Plan for the Academic Program Pharmacy and Drug Technology Program Requirements

The Faculty of pharmacy and drug technology offers one academic program. The program contains mandatory and elective courses. This is in addition of the core program study plan. In the following, there is a list of the mandatory and elective courses represent the program requirements.

Course Code	Course Name	Pre. Code	Prerequisite	Lec	Lab	Sum	Credit Hrs
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### Mandatory Courses

153 Credit Hours

3300	Pharmacy orientation			1	0	1	1
3200	Botany			2	2	4	3
3400	Human Anatomy and Histology			2	2	4	3
3100	General and Physical Chemistry			2	2	4	3
3101	Organic Chemistry 1			3	2	5	4
3401	Medical Terminology			2	0	2	2
3111	Organic Chemistry 2	3101	Organic Chemistry 1	2	2	4	3
3211	Pharmacognosy 1	3200	Botany	2	2	4	3
3311	Physical Pharmacy	3300	Pharmacy orientation	2	2	4	3
3112	Analytical Chemistry 1	3100	General and Physical Chemistr	2	2	4	3
3412	Human Physiology	3400	Human Anatomy and Histology	2	0	2	2
3520	General Biology			2	0	2	2
3620	Microbiology and Immunology	3401	Medical Terminology	3	2	5	4
3720	Pharmacy Management			2	0	2	2
3221	Pharmacognosy 2	3211	Pharmacognosy 1	2	2	4	3
3322	Pharmaceutics 1	3311	Physical Pharmacy	2	2	4	3
3122	Analytical Chemistry 2	3112	Analytical Chemistry 1	2	2	4	3
3630	Pharmaceutical Microbiology	3620	Microbiology and Immunology	2	2	4	3
3531	Biochemistry 1	3101	Organic Chemistry 1	2	2	4	3
3731	Research Methodology			1	0	1	1
3332	Pharmaceutics 2	3322	Pharmaceutics 1	2	2	4	3
3232	Phytochemistry 1	3221	Pharmacognosy 2	2	2	4	3
3132	Instrumental Analysis	3122	Analytical Chemistry 2	2	2	4	3
3640	Medical Microbiology	3630	Pharmaceutical Microbiology	2	2	4	3
3541	Biochemistry 2	3531	Biochemistry 1	2	2	4	3
3242	Phytochemistry 2	3221	Pharmacognosy 2	2	2	4	3
3342	Pharmaceutics 3	3332	Pharmaceutics 2	2	2	4	3

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Course Code	Course Name	Pre. Code	Prerequisite	Lec	Lab	Sum	Credit Hrs
3443	Pharmacology 1	3531	Biochemistry 1	2	2	4	3
3551	Clinical Biochemistry	3541	Biochemistry 2	2	2	4	3
3552	Pharmaceutical Biotechnology 1	3541	Biochemistry 2	2	0	2	2
3752	Pharmacy Legislation	3720	Pharmacy Management	1	0	1	1
3153	Medicinal Chemistry 1	3111	Organic Chemistry 2	2	2	4	3
3453	Pharmacology 2	3443	Pharmacology 1	2	2	4	3
3353	Biopharmaceutics and Pharmacokinetics	3332	Pharmaceutics 2	2	2	4	3
3253	Quality Control of Herbal Drugs	3132	Instrumental Analysis	2	2	4	3
3562	Pharmaceutical Biotechnology 2	3552	Pharmaceutical Biotechnology	2	0	2	2
3763	Health Care Systems	3720	Pharmacy Management	1	0	1	1
3463	Pharmacology 3	3443	Pharmacology 1	2	2	4	3
3163	Medicinal Chemistry 2	3153	Medicinal Chemistry 1	2	2	4	3
3764	Pharmacy Practice 1	3453	Pharmacology 2	2	2	4	3
3765	Pharmacotherapy 1	3453	Pharmacology 2	2	2	4	3
3473	Toxicology and Forensic Medicine	3453	Pharmacology 2	2	2	4	3
3274	Phytotherapy	3242	Phytochemistry 2	1	2	3	2
3774	Pharmacy Practice 2	3764	Pharmacy Practice 1	2	2	4	3
3374	Industrial Pharmacy	3342	Pharmaceutics 3	2	2	4	3
3775	Pharmacotherapy 2	3765	Pharmacotherapy 1	2	2	4	3
3778	Practice in Community Pharmacy	3764	Pharmacy Practice 1	0	4	4	2
3681	Public Health	3640	Medical Microbiology	2	2	4	3
3781	Pharmacoeconomics	3720	Pharmacy Management	2	0	2	2
3483	Pharmaceutical Biostatistics	3453	Pharmacology 2	1	0	1	1
3385	New Drug Delivery Systems	3342	Pharmaceutics 3	2	2	4	3
3285	Drug Design of Natural Products	3253	Quality Control of Herbal Drugs	1	0	1	1
3785	Pharmacotherapy 3	3765	Pharmacotherapy 1	2	2	4	3
3788	Practice in Pharmaceutical Industry	3374	Industrial Pharmacy	0	4	4	2
3789	Graduation Project Part 1	3764	Pharmacy Practice 1	0	2	2	1
3192	Quality Control	3132	Instrumental Analysis	1	2	3	2
3193	Drug Design and Discovery	3153	Medicinal Chemistry 1	1	0	1	1
3494	First Aid	3401	Medical Terminology	1	0	1	1
3396	Drug Quality Assurance	3385	New Drug Delivery Systems	1	0	1	1
3796	Clinical Trials	3765	Pharmacotherapy 1	1	2	3	2
3798	Professional Experience in Hospitals	3774	Pharmacy Practice 2	0	4	4	2
3799	Graduation Project Part 2	3789	Graduation Project Part 1	0	2	2	1
<b>Subtotal:</b>				<b>104</b>	<b>98</b>	<b>202</b>	<b>153</b>

Course Code	Course Name	Pre. Code	Prerequisite	Lec	Lab	Sum	Credit Hrs
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## Elective Courses

9 Credit Hours

3573	Ethics of Biotechnology	3562	Pharmaceutical Biotechnology	2	2	4	3
3776	Pharmacotherapy 4	3774	Pharmacy Practice 2	2	2	4	3
3276	Plant Biotechnology	3221	Pharmacognosy 2	2	2	4	3
3777	Pharmaceutical Marketing	3720	Pharmacy Management	2	2	4	3
3377	Pharmaceutical Technology 1	3332	Pharmaceutics 2	2	2	4	3
3378	Cosmetics 1	3332	Pharmaceutics 2	2	2	4	3
3583	Biotechnological Drug Design	3562	Pharmaceutical Biotechnology	2	2	4	3
3286	Complementary and Alternative Medicine	3221	Pharmacognosy 2	2	2	4	3
3786	Pharmacotherapy 5	3774	Pharmacy Practice 2	2	2	4	3
3787	Sales and Budget Management	3720	Pharmacy Management	2	2	4	3
3387	Pharmaceutical Technology 2	3332	Pharmaceutics 2	2	2	4	3
3388	Cosmetics 2	3332	Pharmaceutics 2	2	2	4	3
3593	Biotechnological Drug Production	3562	Pharmaceutical Biotechnology	2	2	4	3
3296	Production of Medicinal Plants	3221	Pharmacognosy 2	2	2	4	3
3796	Pharmacy Skills	3774	Pharmacy Practice 2	2	2	4	3
3797	Pharmaceutical Marketing Skills	3720	Pharmacy Management	2	2	4	3
3397	Pharmaceutical Technology 3	3332	Pharmaceutics 2	2	2	4	3
3398	Quality Control for Cosmetics	3132	Instrumental Analysis	2	2	4	3

Subtotal: **36** **36** **72** **54**

Statistics:

**Total:** **140** **134** **274** **207**

The percentage of the lecture hours to the total contact hours: **51.1%**

The percentage of the laboratory hours to the total contact hours: **48.9%**