

## School of pharmacy

### Department Medicinal Chemistry

Course title: **Advanced Biopharmacy and Pharmacokinetics**

Credit (Theory or Practical): 2 Credits Theory

*Prerequisite:* Biopharmacy

Course Lecturers: Dr. Faghihi, Dr. Morafah, Dr. Rastegari

Responsible Lecturer: Dr. Faghihi

#### **Student responsibilities:**

- 1- Attend all scheduled classes on time.
- 2- Actively participate in class discussion and activity.
- 3- Complete all assignments, seminars and projects on time
- 4- Engage in respectful and professional communication with lecturers and staff.

#### **Course Description:**

##### **- Course objectives:**

- Understand Advance Principles of Biopharmacy
- Learning pharmacogenetics and drug metabolism
- Learning of principles of control release systems

##### **Student Learning Objectives:**

- Students should understand fundamental principles of Biopharmacy
- Students should learn pharmacogenetics and drug metabolism
- Students should learn principles of control release systems

**Course title: Advanced of Biopharmacy –**

	<b>Subject</b>	<b>Lecturer</b>	<b>Presentation method</b>	<b>Date</b>	<b>Time</b>
1	Nanoparticles effect on drug absorption, distribution, metabolism, and excretion (ADME) 1	Dr.Faghihi	Slide presentation Face to Face class	27/11/403	11-13
2	Nanoparticles effect on drug absorption, distribution, metabolism, and excretion (ADME) 2	Dr. Faghihi	Slide presentation Face to Face class	4/12/403	11-131
3	Overcoming biological barriers with nanoparticles	Dr.Faghihi	Slide presentation Face to Face class	11/12/4031	11-13
4	Pharmacogenetics and drug metabolism	Dr. Faghihi	Slide presentation Face to Face class	18/12/403	11-13
5	Principles of controlled release systems 1	Dr. Morafah	Slide presentation Face to Face class	25/12/403	12-14
6	Principles of controlled release systems 2	Dr. Morafah	Slide presentation Face to Face class	16/01/404	12-14
7	Targeting on Biopharmacy	Dr. Morafah	Slide presentation Face to Face class	23/01/404	11-13
8	In vitro drug product performance	Dr. Morafah	Slide presentation Face to Face class	30/01/404	11-13
9	In vivo drug product performance	Dr. Rastegari	Slide presentation Face to Face class	6/02/404	11-13
10	PD and PK relationship	Dr. Rastegari	Slide presentation Face to Face class	13/02/404	11-13

**References:**

- 1- Recently published research and review articles
- 2- Torchilin, Nanoparticulates as drug carriers
- 3- Rastegari, Nanoscience Applications in Diabetes
- 4- Jain, The handbook of nanomedicine
- 5- Rastegari, Current applications of biomolecules in biopharmaceuticals and drug discovery
- 6- Jack, Targeted drug strategies for cancer and inflammations

**Notes:**

- All classes will be held in Besarati (Eastern 7) street, North Shahin Boulevard

The absence hours of a student should not exceed 4/17 in theoretical, 2/17 in practical and laboratorial. Otherwise, the score for that course or section will be considered as zero.

Note 1: allowed absences are accepted provided that students bring in documents for that and the related professor approves it. Acting against absences (either excused or not) will be the decision of the professor and agreement of the college.

### **Student Evaluation**

<b>Seminar and class activity</b>	2
<b>Final exam</b>	18
<b>Total Score</b>	20