

School of pharmacy

Department Medicinal Chemistry

Course title: **Pharmaceutical Nanotechnology**

Credit (Theory or Practical): 1Credit Practical

Prerequisite: Pharmaceutics

Course Lecturers: Dr. Rastegari

Responsible Lecturer: Dr. Rastegari

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:

Familiarity with methods of preparing nanoparticles

Familiarity with common methods of preparation of liposomes

Familiarity with the nanoencapsulation method

Familiarity with the method of preparing quick dissolving films

Familiarity with characterization methods of nanoparticles

Students are expected to:

- learn methods of preparing nanoparticles - learn targeted drug delivery
- learn common methods of preparation of liposomes
- learn nanoencapsulation method
- learn method of preparing quick dissolving films
- learn characterization methods of nanoparticles

Course title: Pharmaceutical Nanotechnology Practical – Wednesdays (10-12)

	Subject	Lecturer	Presentation method	Date
1	Nanoencapsulation 1	Dr. Rastegari	Practical	25 Sep
2	Nanoencapsulation 2	Dr. Rastegari	Practical	2 Oct
3	Liposomes preparation 1	Dr. Rastegari	Practical	9 Oct
4	Liposomes preparation 2	Dr. Rastegari	Practical	16 Oct
5	Pharmaceutical Film preparation	Dr. Rastegari	Practical	23 Oct
6	Inorganic nanoparticle preparation 1	Dr. Rastegari	Practical	30 Oct
7	Inorganic nanoparticle preparation 2	Dr. Rastegari	Practical	6 Nov
8	Purification methods	Dr. Rastegari	Practical	13 Nov

References:

- 1- Recently published research and review articles
- 2- Torchilin, Nanoparticulates as drug carriers
- 3- Jain, The handbook of nanomedicine

Notes:

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

The absence will not be acceptable for practical courses and any absence is equal to zero for final score.

Student evaluation:

Lab reports and practical experiments	10
Final exam	10
Total Score	20

