



The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

1	Course title	Selected Topics In Physical Pharmacy
2	Course number	1202532
3	Credit hours (theory, practical)	2
	Contact hours (theory, practical)	2 per week
4	Prerequisites/corequisites	
5	Program title	B.Sc In Pharmacy
6	Program code	
7	Awarding institution	The University of Jordan
8	Faculty	Pharmacy
9	Department	Pharmaceutics & Pharmaceutical Technology
10	Level of course	Fifth year
11	Year of study and semester (s)	2016-2017, First semester
12	Final Qualification	B.Sc
13	Other department (s) involved in teaching the course	
14	Language of Instruction	English
15	Date of production/revision	11 Jan 2017

16. Course Coordinator:

Office number: 212,
Office hours: 12-5 Sunday, 12-2 Tuesday,
Phone numbers: ext. 23325,
email address: ekayoub@ju.edu.jo

17. Other instructors:

None

18. Course Description:

The role of the Physico-Chemical properties of drug molecules in drug formulation, delivery and detection will be discussed for a selected dosage forms and routes of administration. An introduction will be followed by a discussion of selected published articles that deal with specific problems related to that topic. The students are required to participate in the discussion.

The main topics to be discussed are:

- Surfactant Containing Systems: Polymeric micelle (PM), Microemulsions (ME) and Liquid crystals (LC).
- Solubility and Complexation
- Dissolution and Diffusion
- Chemical Stability of drugs
- Rheology.

19. Course aims and outcomes:

A- Aims:
The aim of this course is to take the student one step ahead in the recognition of the importance of the physicochemical properties of drug molecules at the properties of the finished product. Also one major aim of this course to encourage students to read and discuss related published articles were they learn how to measure, present and explain the different physical properties .
B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to ...
Realize the importance of the topics he studied earlier in the Physical Pharmacy courses,
Obtain comprehensive understanding about the relation between the different physicochemical parameters,
Learn, through real examples, the relation between the physicochemical properties and drug bioavailability,
Learn, through real examples, the relation between the physicochemical properties and final product properties,
Acquire knowledge about the different experimental methods used in measuring the physicochemical properties,
Acquire knowledge about the methods used in the presentation of the experimental results,
Acquire experience in searching for published articles in certain areas,
Acquire knowledge in extracting information from the read article,
Acquire oral presentation skills experience.

20. Topic Outline and Schedule:

1.					
Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
PM	2 weeks	Enam Khalil	All	Written Exams and oral presentation and discussion.	Mainly Published articles. Basic books like Physical Pharmacy were recommended.
ME	1 week	Enam Khalil	All		
LC	1 week	Enam Khalil	All		
Solubility	1.5 week	Enam Khalil	All		
Stability	1.5 week	Enam Khalil	All		
Diffusion	1.5 week	Enam Khalil	All		
Rheology	1.5 week	Enam Khalil	All		

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following <u>teaching and learning methods</u> :
<ul style="list-style-type: none"> • Lecturing, • Search for and selection of suitable research article, • Oral presentations and discussion of the selected article.

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following <u>assessment methods and requirements</u> :
<ul style="list-style-type: none"> • Exams, • Presentations.

23. Course Policies:

A- Attendance policies:

B- Absences from exams and handing in assignments on time: observation of students attendance (when registration process is final): taking the reason into consideration before taking any further action.

C- Health and safety procedures: NA

D- Honesty policy regarding cheating, plagiarism, misbehavior: Exams and homework are observed for any of these misconducts.

E- Grading policy: following the regulations.

F- Available university services that support achievement in the course: books are available, limited electronic references are available.

24. Required equipment:**25. References:**

A- Required book (s), assigned reading and audio-visuals:

Some Basic Reading References:

- Physical Pharmacy, Physical Chemical Sciences, A.Martin et al., 4th ed. 1993. Published by Lea and Febiger, U.S.A..
- Physico-Chemical Principles in Pharmacy by A.T. Florence and D. Attwood ,1985, Macmillan Publisher LTD, London.
- Pharmaceutic, The Science of Dosage form Design , Ed. M.E. Aulton.1988, Published by ELBS.U.K.
- Pharaceutical Calculations. Mitchell J. Stoklosa and Howard C. Ansel. 7th edition, 1980. Published by Lea and Febiger, U.S.A..
- Bently's Text Book of Pharmaceutics, by E.A.Rawlins, 8th Edition, 1984, Published by ELBS.U.K.

B- Recommended books, materials, and media:

Published articles.

26. Additional information:

Name of Course Coordinator: Enam khalil Signature: ----- Date: 12 Jan 2017

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:

Head of Department
Assistant Dean for Quality Assurance
Course File