# Jerash Public University Faculty of Pharmacy

#### Pharmaceutics I Lab

## Semester 1 – Year 2016/2017 Course Syllabus

Course Information		
Course Title	Pharmaceutics I lab	
Course Code		
Prerequisites		
Course Website		
Instructor	Dr. Shadi Gharaibeh	
Office Location		
Office Phone #		
Office Hours	TBA	
E-mail		
Teaching Assistant(s)	TBA	

### **Course Description**

This pharmacy practice lab focuses on a number of areas of interest in the fields of pharmacy practice and pharmaceutical care. These areas include: compounding of suspensions, emulsions, semisolids, and suppositories. In addition it builds up focus on patient care in a pharmacy setup in areas of construction of patient charts, drug therapy problems, literature search, patient counseling, and vital signs assessment.

**Textbook:** please refer to the attached list of electronic and hardcopy resources.

Assessment Policy		
Assessment Type	Expected Due Date	Weight
Mid term Exam	ТВА	25%
Final Exam	ТВА	40%
Quizzes	Every week	15%
Assignments and reports	Every week	5%
Personal Evaluation and attendance	Every week	10%
Counselling techniques and product evaluation	Every week	5%
Total		100%

Course Objectives	Percentage
Practice compounding of emulsions, suspensions, and semisolid preparations	50%
Practice construction of patient charts and evaluate drug therapy problems	20%
3. Practice patient counseling, evaluation of vital signs, and proper use of glucometers	15%
Practice advanced literature search for pharmacy related information	15%

- Teaching & Learning Methods

  1. Lab notes on each experiment containing an introduction and self reading materials.
  2. In-lab experiments (compounding).
  3. In-lab assignments.
  4. In-lab determination of vital signs.
  5. Writing reports.

Learning Outcomes: Upon successful completion of this course, students will be able to		
Related Objective(s)		Reference(s)
1	Carry out compounding of different semisolid preparations, emulsions, and suspensions.	NA
2	Read and fill patient charts, identify drug therapy problems in a prescriptions and propose adequate recommendations for these problems.	NA
3	Carry out successful patient counseling and determination of blood pressure, pulse, body temperature, and blood glucose.	NA
4	Carry out literature search to obtain reliable information related to pharmaceutics and pharmaceutical care.	NA

week	topics	Details
1	Drug Therapy Problems (DTP)	1-Practice Identifying types of (DTP) that could occur. 2-Practice literature search to find out the solution to an identified DTP. 3-Practice writing and presenting a recommendation regarding a DTP.
2	- Rheology - Using a glucometer	1-Determination of viscosity using Ostwald viscometer. 2-Practice use of a glucometer to measure glucose level in blood.
3	Phase equilibrium	1-Identify the number of phases associated with mixing of partially miscible liquid phases (phenol/water) 2- Identify the number of phases associated with mixing of solids (salol/thymol) 3-Patient counseling.

4	Surface tension	1- Determination of surface tension of different liquids.
		2- Literature search. 3-practice patient counseling.
5	Preparation of suspensions	1- Compounding of a suspension formulation. 2-practice reconstitution of a suspension formulation. 3- Literature search. 4-practice patient counseling.
6	Preparation of a liquid emulsion	1-Compounding of a liquid emulsion formulation. 2- Literature search. 3-practice patient counseling. 4-DTP in-lab assignment.
7	Preparation of a w/o semi solid formulation (cream)	1-Compounding of cold cream. 2- Literature search. 3-practice patient counseling.
8	Preparation of a o/w semi solid formulation (cream)	1- Compounding of Vanishing cream. 2- Literature search. 3-practice patient counseling (aerosols). 4-Review of glucometer use.
9	Semisolids incorporation techniques.	<ul><li>1- Incorporation of potent and non-potent drugs in a cream base.</li><li>2- Incorporation of potent and non-potent drugs in an ointment base.</li><li>3-Incorporation of two semisolid formulations.</li></ul>
10	Preparation of rectal suppositories.	1- Compounding of a rectal suppository formulation. 2- Literature search. 3-practice patient counseling. 4-Review of DTP (in-lab assignment)

	Additional Notes
Lab rules	Dressing code: Professional dressing is required, with a clean lab coat and tag name.
Exams	The format for the exams is generally (but NOT always) as follows: Multiple-choice and short essay questions.
Makeup Exams	Make up exam should not be given unless there is a real valid excuse.
Cheating	The commitment of the acts of cheating and deceit such as copying during examinations, altering examinations for re-grade, plagiarism of homework assignments, and in any way representing the work of others as your own is dishonest and will not be tolerated. Standard JUST policy will be applied إذا ضُبط الطالب أثناء الامتحان أو الاختبار متلبساً بالغش فتوقع عليه العقوبات التالية: مجتمعة:  أ- اعتباره راسباً في ذلك الامتحان أو الاختبار.  ب- الغاء تسجيله في بقية المساقات المسجل لها في ذلك الفصل.  ج- فصله من الجامعة لمدة فصل در اسي واحد، و هو الفصل التالي للفصل الذي ضبط فيه.
Attendance	<ul> <li>Excellent attendance is expected.</li> <li>JUST policy requires the faculty member to assign ZERO grade (35) if a student misses 10% of the classes that are not excused.</li> <li>If you miss class, it is your responsibility to find out about any announcements or assignments you may have missed.</li> <li>Grade bonuses are subjected to attendance.</li> </ul>
Workload	Average work-load student should expect to spend is 3 hours/week