



Jordan University of Science and Technology
Faculty of Pharmacy
Pharmacy Department

PHAR329 Pharmaceutical Analytical Chemistry & Instrumental Analysis Lab

First Semester 2021-2022

Course Catalog

1 Credit Hours. This is a practical course in pharmaceutical analytical chemistry and instrumental analysis which introduces quantitative analysis to determine the concentration of a given solution by using titration technique. Various quality control methodologies that are considered standards in pharmaceutical literature. Analysis of raw materials as well as formulated preparation will be performed using standard analytical techniques. A tour to a pharmaceutical company will be scheduled to expose students to the different instrumental techniques that are used in industry as well as manufacturing lines, registration and approval units, and research and development units.

Text Book

Title	British Pharmacopoeia
Author(s)	Many
Edition	5th Edition
Short Name	Ref #2
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref #1	Manual for Analytical Chemistry and Pharmaceutical instrumental Analysis	Dr. Fawzyiah	1st Edition	
Ref #3	www.drugs.com	Website	1st Edition	

Instructor

Name	Mrs. Dua Alsinglawi
Office Location	-
Office Hours	
Email	dsalsinglawi6@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun : 12:30 - 14:30

Room: LAB

Section 2:

Lecture Time: Mon : 14:30 - 16:30

Room: LAB

Section 3:

Lecture Time: Tue : 12:30 - 14:30

Room: LAB

Section 4:

Lecture Time: Wed : 10:30 - 12:30

Room: LAB

Section 5:

Lecture Time: Thu : 10:30 - 12:30

Room: LAB

Section 6:

Lecture Time: Wed : 12:30 - 14:30

Room: LAB

Section 7:

Lecture Time: Mon : 12:30 - 14:30

Room: LAB

Section 8:

Lecture Time: Mon : 10:30 - 12:30

Room: LAB

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Check in and orientation	
Week 2	Acid-Base titration: Determination of unknown base solution	
Week 3	Oxidation-Reduction titration: Standardisation of potassium permanganate solution	
Week 4	Vitamin C (Ascorbic acid)	
Week 5	Assessment of Aspirin tablet purity	
Week 7	Spectrophotometry: quantitative analysis of potassium dichromate	
Week 8	Spectrophotometry: quantitative analysis of salicylic acid	
Week 9	Indomethacin Capsule	
Week 6	Mid-term practical examination	
Week 10	Potentiometric titration: pKa determination of an Unknown acid	

Relationship to Program Student Outcomes (Out of 100%)

SO1.1	SO2.1	SO3.2	SO3.3	SO2.2	SO2.3	SO2.4	SO3.1	SO3.4	SO3.5	SO3.6	SO4.1	SO4.2	SO4.3	SO4.4

Date Printed: 2021-12-09