



CHE422 Chemical Industries

3 credit hour, 3 contact hour lecture, 3 credit hour Eng.

Instructor

Instructor: Dr. Munther Kandah

E-mail: mkandah@just.edu.jo

Textbooks & References

A. Textbook

	Textbook 1
Title	“Chemical Process Industries”
Author(s)	R. Norris Shreve and Joseph A Brink, Jr
Publisher	McGraw-Hill
Year	1997
Edition	4 th edition

B. References

- E. Stocchi, "Industrial Chemistry," 5th edition..

Specific Course Information

A. Course Catalog:

- Fundamentals of chemical industries. Study of selected industries such as water treatment; industrial gases; ceramic, cement and glass industries; fertilizers industries; sulfuric acid; phosphoric acid; etc. case studies on industries related to consumer products.

B. Prerequisites or co-requisites

CHE463 Separation Processes

C. Required/Elective or Selected Elective

Required

Objectives and Outcomes*

1. Introducing the meaning of chemical engineering and he is different than the chemist [2,3]
2. Understanding the role of Chemical processing and the work of the chemical engineer [1,2,3]
3. Understanding the technology of different chemical industries such as: Water conditioning and environmental protection, Industrial Gases, Ceramic Industries, Portland cements, Phosphorus Industries, Potassium Industries and Soap and Detergent Industries [1,2,3]

Contribution of Course to Meeting the Professional Component

Relationship to Student Outcomes (%)

1	2	3	4	5	6	7
40	40	20				

Relationship to Chemical Engineering Program Objectives

PEO1	PEO2	PEO3	PEO4	PEO5	PEO6
√	√	-	-	-	-

Topics Covered

Week	Topics	Chapters in Text
1	Chemical processing	Chapter 1
1	Chemical processing and the work of the chemical engineer	Chapter 2
2	Water conditioning and environmental protection	Chapter 3
3	Industrial Gases	Chapter 7
4	Ceramic Industries	Chapter 9
5	Portland cements, calcium and magnesium compounds	Chapter 10
6	Phosphorus Industries	Chapter 16
7	Potassium Industries	Chapter 17
8	Soap and Detergent Industries	Chapter 29

Evaluation

Assessment Tool	Expected Due Date	Weight
Project	After the second exam	20%
First Exam	According to the department schedule	20 %
Second Exam	According to the department schedule	20 %
Final Exam	According to the University final examination schedule	40 %

* Number in brackets refer to the Program outcomes