MUTAH UNIVERSITY
Faculty of Engineering
Department of Chemical Engineering

Separation Processes and Mass Transfer Lab

COURSE SYLLABUS

Course Code	Course Name	Credits	Contact Hours
0404531	**Separation Processes and Mass Transfer Lab**	**3**	

INSTRUCTOR/COORDINATOR	
Name	**Prof. Adnan Al-Harahsheh**
Email	Adnan@mutah.edu.jo
Website	

TEXTBOOK
Other Supplemental Materials

SPECIFIC COURSE INFORMATION
A. Brief Description of the Content of the Course (Catalog Description)
This laboratory aims to provide the student with practical and applied knowledge of industrial separation processes and includes experiments in distillation, absorption, and extraction of compounds from solids.
B. Pre-requisites (P) : 0404459
C. Course Type (Required or Elective)
Required (Compulsory department course)

SPECIFIC GOALS
A. Specific Outcomes of Instruction

To conduct require experiments in appropriate way (6)
To perform analysis of obtained experimental data (6)
To express results of experiments and to draw a final conclusions (6)
To work effectively in team (5)
Ability to communicate and to present final reports (3,5)

B. Student Outcomes Addressed by the Course

1	2	3	4	5	6	7				
		✓		✓	✓					

BRIEF LIST OF TOPICS TO BE COVERED

List of Topics	No. of Weeks	Contact Hours
Introduction to Lab Safety Regulations	1	3hs/ week
Batch Distillation Experiments (Total Reflux Ratio)	1	3hs/ week
Batch Distillation Experiments (Variable Reflux Ratio)	1	3hs/ week
Hydrodynamic Study of Gas Absorption (Flooding and Pressure drop)	1	3hs/ week
Hydrodynamic Study of Gas Absorption (Separation Performance)	1	3hs/ week
Liquid –Solid Extraction Experiments (Batch & continuous)	1	3hs/ week
Liquid –Solid Extraction Experiments (Batch & continuous)	1	3hs/ week
Mass Transfer Coefficient	1	3hs/ week
Review	1	3hs/ week

METHODS OF ASSESSMENT

No.	Method of assessment	Week and Date	%
1	Mid Exam	6th week	**30**
2	Reports	2-14	**30**
3	Final examination	End of Semester	**40**
Total			**100**