Flow up of implementation celli pass play

Course Instructor	Ahmed Daham
E-mail	ahmed_chem٧٦@yahoo.com
Title	**Mass Transfer**
Course Coordinator	Annually
Course Objective	To give the students a application of diffusion theory to simple mass transfer problems. Analysis of chemical engineering unit operations involving mass transfer. Design principles for mass transfer equipment. Solids/Liquids separation processes. liquids/Liquids separation processes. gases/Liquids separation processes.
Course Description	This course covers the fundamentals of the basic concepts of mass transport and understanding about diffusion theory, gas absorption, liquid-liquid extraction, leaching , distillation, humidification, drying and evaporation.
Textbook	١. Coulson J.M. & Richardson J.F., Chemical Engineering, Volume ١, six edition, ELBS, Pergamon Press. ٢٠٠٢. ٢. Coulson J.M. & Richardson J.F., Chemical Engineering, Volume ٢, fifth edition, ELBS, Pergamon Press. ٢٠٠٢.

Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	٤٠٪	٠	١٠٪	-	٥٠٪

General Notes	This subject is very important in understanding the principles and calculations of mass transfer.

Republic of Iraq

The Ministry Of Higher Education

& Scientific Research

University:

College:

Department:

Stage:

Lecturer name:

Qualification:

Place of work

Course Weekly Outline

Week	Date	Topes Covered	Lab. Experiment Assignments	Notes
١	٢١, Sep. ٢٠١٤	Diffusion , flick's law, modes of diffusion		
٢	٢٩, Sep. ٢٠١٤	Multi-components mixture, correction of diffusivity		
٣	٠٦ Oct. ٢٠١٤	Diffusion in varying cross section area		
٤	١٣ Oct. ٢٠١٤	Diffusivity coefficient in liquid and gas		
٥	٢٠ Oct. ٢٠١٤	Mass transfer theory		
٦	٢٧, Oct. ٢٠١٤	Mass transfer coefficient, wetted wall column		
٧	٣ Nov. ٢٠١٤	Absorption, equilibrium of gas and liquid		
٨	١٠, Nov. ٢٠١٤	Packed tower		
٩	١٧ Nov. ٢٠١٤	Tray tower		
١٠	٢٤ Nov. ٢٠١٤	Calculation of tower diameter, stripping		
١١	٠١ Dec. ٢٠١٤	Extraction , differential type		
١٢	٠٨ Dec. ٢٠١٤	Completely immiscible		
١٣	١٥, Dec. ٢٠١٤	Party miscible		
١٤	٢٢, Dec. ٢٠١٤	Leaching, batch leaching		
١٥	٢٩, Dec. ٢٠١٤	Continuous leaching, constant under flow		
١٦	٠٥, Jun. ٢٠١٤	Continuous leaching, variable under flow		
Half – year break				

۱۷	۱٦, Feb. ۲۰۱٥	Distillation , vapor-liquid equilibrium		
۱۸	۲۳, Feb. ۲۰۱٥	Differential type		
۱۹	۰۲, Mar. ۲۰۱٥	flash distillation		
۲۰	۰۹, Mar. ۲۰۱٥	Continuous distillation (binary system)		
۲۱	۲۳, Mar. ۲۰۱٥	Calculation the number of stages and reflux ration in continuous distillation		
۲۲	۳۰, Mar. ۲۰۱٥ ۰٦, April, ۲۰۱٥	Multi-feeds and side stream , lewis sorial method		
۲۳	۰۸ and ۱۳, April ۲۰۱٥	Ponchon-savarit method		
۲٤	۱٥ and ۲۰, April ۲۰۱٥	Batch distillation with constant reflux ratio		
۲٥	۲۱ and ۲۷, April ۲۰۱٥	and with constant product composition		
۲٦	۲۹, April, ۲۰۱٥ ۰٤, May, ۲۰۱٥	Multi-component distillation		
۲۷	۰٦, May, ۲۰۱٥	Humidification , humidity		
۲۸	۱۳, May, ۲۰۱٥	Cooling tower calculation		
۲۹	۲۰, May, ۲۰۱٥	Height of cooling tower, carey method		
۳۰	۲۷, May, ۲۰۱٥ ۰۱, June, ۲۰۱٥	Drying process		
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INSTRUCTOR Signature: **Dean Signature:**