

CHE (258)301 **Unit Operations of Chemical Engineering I****3(3/3-0/0)****Abbreviation** UNIT OP CHEM ENG I**Prerequisite** **CHEM 102 and third year standing****Course Description**

Introduction, fluid statics, flow of absolute fluid, flow of real fluid, ordinary flow meter, heat transfer principle, heat transfer applications, evaporation, and mass transfer principle.

Objective

Students will be able to understand principle, operation and design of unit operations involving fluid mechanics, heat transfer and mass transfer.

Course Content**Lecture Hours**

1. Introduction	1
2. Fluid statics	4
3. Flow of absolute fluid	3
4. Flow of real fluid	6
5. Ordinary flow meter	1
6. Heat transfer principle	6
7. Heat transfer applications	5
8. Evaporation	4
9. Mass transfer	15
9.1 Fick's laws of diffusion	
9.2 Diffusion in fluid and solid	
9.3 Mass transfer by convection	

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