

Department of Chemical Engineering			
Soap and Detergent Manufacturing Lab. (64478)			
Total Credits	0		
major compulsory			
Prerequisites	P1 : Soap and Detergent Manufacturing (64475) P11Synch. : Soap and Detergent Manufacturing (64475)		
Course Contents			
This lab aims of showing students the practical processes of manufacturing Soap and Detergent and the method of testing their properties and safety regulations needed during their preparations.			
Intended Learning Outcomes (ILO's)		Student Outcomes (SO's)	Contribution
1	By the end of this course, the students will be able to design and conduct experiments in a team basis as well as interpret data related to detergent products to meet the desired needs of achieving good detergent quality products.	B	100 %
Textbook and/ or References			
Prepared lab manual. Liquid Detergent, edited by Kuo Yanna Lai, Taylor and Francis group, 2006, ISBN: 10: 0-8247-5835-8			
Assessment Criteria		Percent (%)	
Quizzes		5 %	
Laboratory Work		55 %	
Final Exam		40 %	
Course Plan			
Week	Topic		
1	Introduction: Safety Rules and How to Write a Laboratory Report		
2	Attending prerequisite course classes		
3	Attending prerequisite course classes		
4	Material identification		
5	Differentiate between different types of surfactants		
6	Determination of saponification number for normal olive oil		
7	Determination of saponification number for treated olive oil		
8	Manufacturing of soap		
9	Manufacturing of shampoo		
10	Soap and Detergent tests		
11	Discussion		
12	Dry cleaners manufacturing		
13	Hair Gel manufacturing		
14	Dry cleaners and Hair Gel tests		
15	Discussion		