

SAULT COLLEGE
of Applied Arts and Technology
Sault Ste. Marie

COURSE OUTLINE

ORGANIC CHEMISTRY LAB II

CHM 128 Semester 2

Med. Lab Technology and Chemical
Engineering Technician.

revised May, 1980



90 - 100 = A
80 - 89 = B
70 - 79 = C
Lower than 69 = D

INTRODUCTION:

CHM 128 is a continuation of CHM 118, with emphasis on synthetic, organic chemistry. The student completes four experiments, one of which is a three-step synthesis involving the preparation of methylbenzoate. The student project is an experiment designed by the student; he/she studies one additional reaction (but should not be of the aromatic type) which may be substitution, elimination, oxidation, etc. In addition, the student identifies two organic unknowns.

EXPERIMENTS:

- #1 - Bromination of benzene* - aromatic substitution reaction.
 #2 - preparation of ethylbenzene* - Friedel-Crafts alkylation.
 #3 - Preparation of Benzoic Acid* - Side chain oxidation reaction.
 #4 - Preparation of Methyl Benzoate* -

NOTE: Experiments #1-4 require the use of the refractometer, gas chromatography and infrared spectrophotometer.

- #5 - Qualitative Organic Analysis -
 a) identification of unknown alcohol or carbonyl
 b) identification of general unknown
 #6 - Student Project - a reaction of the students own choice.

EVALUATION:

*Data Sheets	4 x 10	=	40
Unknowns	2 x 10	=	20
Project	1 x 10	=	10
Lab Book	1 x 30	=	30
TOTAL	-----		<u>100</u>

*Data sheets are to be submitted on each of the first 4 experiments, upon completion of the experiment. Late reports will be marked at a lower value.

GRADING:

90	-	100	=	A
80	-	89	=	B
70	-	79	=	C
Lower than		69	=	I