The University of Tennessee at Martin
Department of Chemistry
CHEM 341L ORGANIC CHEMISTRY I LABORATORY SYLLABUS– Spring 2009

CHEM 341-054 **Day/Time** T 3-5:50 pm **Room**: **EP 317**
Instructor: Dr. William Solomons

TEXT
Required: Laboratory Manual: Organic Chemistry Laboratory Experiments. Devenyi, Osburn and Solomons UT Martin Department of Chemistry 2008

COURSE DESCRIPTION: Organic Chemistry I Laboratory component (1 cr) a three hour lab period per week. First semester of CHEM 341L/342L sequence. Prerequisite: CHEM 122.

ATTENDANCE: It is mandatory that you complete the practical and write up for each experiment. That is, you must attend every laboratory period. The **only** make up opportunity is to attend another lab section the same week of the experiment. This must be approved by your instructor and the instructor of the lab section you wish to attend as the make up.

SAFETY QUIZ: There will be a safety quiz during the prelab of the second week of the semester.

EXAMS: There will be a midterm exam (see schedule) examining the first half of the course and a final (see schedule) examining only the second half of the course. If you encounter some unavoidable difficulty or personal problem which affects your taking exams at the stated times, it is your responsibility to see your professor before the exam date to find a mutual solution. **There will be no make-up exams or quizzes**.

STUDENTS WITH DISABILITIES: Any student eligible for and requesting academic accommodation due to a disability is to provide a letter of accommodation from P.A.C.E. or Student Academic Support Center within the first two weeks of the semester.

ACADEMIC INTEGRITY As stated in the University of Tennessee at Martin Undergraduate and Graduate catalog 2007-2008. Dishonesty, unethical behavior, cheating or plagiarism does not belong at any tertiary education institution. Please refer to listed points 1-14 in University Catalog. Academic dishonesty of any kind is utterly unacceptable and is grounds for immediate dismissal from this class whether it is related to the lecture or laboratory component. Students are especially tempted to use previously completed lab reports when completing their own. Such an incident will constitute grounds for immediate dismissal from the class at the discretion of the instructor and receiving a grade of F and potential further academic disciplinary actions as judged appropriate by Student Affairs.

LAB REPORTS:
Lab reports are of two types.
(i) "Fill in the blank" reports are provided at the end of each experiment in the lab manual. These are due at the end of the lab period where you completed an experiment (unless otherwise stated by your instructor). These reports are graded out of 10 points
(ii) Formal reports are full experimental write-ups (**typed,** diagrams and structures may be hand drawn) and are graded as per the lab schedule. These reports are graded out of 20 points

PRE-LAB:
You are required to read the experiment before coming to pre-lab. Some experiments have prelab requirements that must be fulfilled for you to be able and allowed to conduct the lab. These pre-lab exercises are described in the experimental write up.
Each lab begins with a short pre-lab discussion by your instructor before entering the lab and conducting the experiment(s)

GRADING AND EVALUATION OF PROGRESS:
Student progress will be monitored by graded lab reports (see lab manual) a midterm and a final

Overall Lab Grade = (Avg of experiment grades) (0.55) + (Avg of lab exams) (0.45)

CHEM 341L SCHEDULE – Spring 2009

The proposed schedule below shows the dates that experiments will be conducted. You must read the experiment prior to the lab period. The instructor reserves the right to change the schedule.

DATES (beginning)	**EXPERIMENT**
Week 1 (Jan 12)	Introduction, Safety, Check in Exp 1: Melting Point
Week 2 (Jan 20)	**SAFETY QUIZ** Exp 2: Recrystallization
Week 3 (Jan 26)	Exp 3: Chromatography
Week 4 (Feb 2)	Exp 4: Distillation
Week 5 (Feb 9)	Exp 5: Isolation of Caffeine from tea Leaves
Week 6 (Feb 16)	Exp 6: Dehydration of Alcohols; IR Spectroscopy
Week 7 (Feb 23)	**MIDTERM** (Experiments 1-6) Exp 7: Diels Alder (Start)
Week 8 (March 2)	Exp 7: Diels Alder (Complete) Exp 8: Competitive Nitration (Start)
NO CLASS March 9th – 13th Spring Break	
Week 9 (March 16)	Exp 9: Competitive Nitration (Complete)
Week 10 (March 23)	Exp 10: Unknown ID Part I ^{13}C NMR, Boiling Point
Week 11 (March 30)	Exp 11: Unknown ID Part II Mass Spectrometry
Week 12 (Apr 6)	Exp 12: Unknown ID Part III ^{1}H NMR Spectroscopy
Week 13 (Apr 13)	Exp 13: Nucleophilic Substitution Reactions
Week 14 (Apr 20)	Exp 14: Formal Unknown write up due Review
Week 15 (Apr 27)	**FINAL** (Experiments 7-12) Check out