SYLLABUS **Teaching Assistant:**_____
Organic Chemistry Laboratory A **TA's Room & Phone:**_____
Chemistry 225: Summer I 2011 **TA's Office Hours:**_____

Description: A one-semester-hour laboratory course designed to accompany organic chemistry lecture courses.

Pre-requisites: Prior completion of and a grade of 'C-' or better in 1 year of General Chemistry Lecture and Lab.

Materials: Catalyst: Custom Laboratory Program; Tim Thomas
CHEM 225 Edition; Pearson/ Prentice Hall

Safety glasses are provided on the first day of class and must be brought to every lab.

Grading:		
	8 pre-lab exercises, 10 pts each	80 pts
	3 assignments, 10 pts each	30 pts
	2 in-class exercises, 5 pts each	10 pts
	8 results sheets, 10 pts each	80 pts
	2 exams, 100 pts each	200 pts
	Technique	50 pts
		450 pts total

Course grades will be assigned on the following scale: A>95%, A->92%, B+>90%, B>82%, B->80%, C+>78%, C>72%, C->70, D+>68%, D>60%, F<60%

Pre-Lab Preparation: Success in organic lab depends on advance preparation. Therefore, there are several things you must do before coming to lab. One major component of your pre-lab assignment is to thoroughly read and understand the background material and the experimental procedure. A reading list is attached to this syllabus. If you have questions, consult with your Teaching Assistant or the Lab Instructor well before your lab section. Do not wait until the few minutes before class.

Pre-lab exercises: STUDENTS WHO DO NOT COMPLETE THE PRE-LAB EXERCISES WILL NOT BE ALLOWED TO PERFORM THE EXPERIMENT.

Results: At the end of each experiment, you must submit a Results sheet **before you leave the lab**. This sheet summarizes your laboratory results and is contained in your lab manual.

Technique: Your success in lab goes beyond what appears on paper. Attention to safety, housekeeping, level of preparation, ability to work with others, ability to follow directions, correctly completing procedures and ability to work independently are also important. Safety violations will be addressed immediately and are described in a different section.

Assignments: There are three out-of-class assignments for the course. One covers software for drawing and modeling organic structures. A second deals with resources for finding information about organic compounds. The third covers tools for exploring the organic chemistry literature. Detailed instructions for the assignments and due dates will be posted on Blackboard. All of the due dates are firm. No late work will be accepted.

Exams: The exams will cover all portions of the course—the assigned readings, laboratory procedures, topics discussed in class, etc. A portion of the exams also consists of hands-on assessments of your laboratory technique.

Attendance: You are expected to attend every lab session. Due to safety constraints and size limitations, YOU WILL NOT BE ALLOWED TO MAKE UP AN EXPERIMENT IN ANOTHER SECTION. Missing a lab period will result in a zero for all work related to that experiment. If you miss an experiment for a justifiable reason—court summons, death in the immediate family, serious illness, etc.—you must notify the lab instructor in writing within 24 hours. Documentation will be required. If your absence is approved, your final grade will be based only on the experiments you actually performed. If you miss a second experiment, you have missed a significant portion of the course and should either drop or request an incomplete. A maximum of one and only one excused absence will be allowed for each student for each semester.

You should also come to lab on time. For safety reasons and fairness to your lab partner, you must arrive in time to hear the pre-lab lecture. Any student who is late by 10 minutes or more will not be allowed to perform the experiment and will be marked absent.

Safety Rules: These are contained the textbook and will be read aloud on the first day of class. Read the safety rules carefully and follow them throughout the course. ANYONE WHO DOES NOT ADHERE TO THE SAFETY RULES WILL NOT BE ALLOWED TO REMAIN IN THE LABORATORY. **Failure to adhere to the safety rules will also be reflected in the technique score.**

Academic Integrity: Each student is expected to do her/his own work. Although the lab is constructed so students may work in pairs during an experiment, all work submitted for a grade must be an individual effort. The penalty for academic dishonesty is a grade of 'F' for the course.

Email: You must use your Loyola email address when contacting the TAs or instructor for this course. Emails from outside sources are often blocked automatically.

Lab Coordinator: Timothy Thomas LSB 124
(773) 508-8115 email: TTHOMA1@LUC.EDU

Tentative Schedule—Subject to change
Organic Chemistry Laboratory A, Chemistry 225, Summer I 2011
May

Monday	Tuesday	Wednesday	Thursday	Friday
23 Syllabus, Safety, Check-In	**24**	**25** Modeling, Organic Chemical Behavior	**26**	**27**
30 Memorial Day	**31**			

June

Monday	Tuesday	Wednesday	Thursday	Friday
		1 Organic Chemical Behavior continued	**2**	**3** Melting Point
6 Distillation	**7**	**8** Crystallization	**9**	**10**
13 Exam 1	**14**	**15** Extraction	**16**	**17**
20 Chromatography	**21**	**22** 2-Chloro-2-Methylpropane	**23**	**24**
27 Octenes	**28**	**29** Check-Out/ Exam 2		

Chem 225 Reading Assignments[1]

Introduction		169
Safety/ Modeling		171-176 Modeling Handout
Organic Chemical Behavior	Operation 1:	pp. 3-4
	Procedure:	pp. 177-184
Melting Point	Operation 30:	pp. 137-143
	Procedure:	pp. 185-192
Chemical Information		Handout
Distillation	Operations 5, 27:	pp. 13-16, 122-135
	Procedure:	pp. 193-200
Crystallization	Operations 7, 12, 13, 25:	pp. 20-32, 40-43, 43-46, 104-118
	Procedure:	pp. 201-206
Extraction	Operations 15, 22:	pp. 48-57, 93-98
	Procedure:	pp. 207-214
Chromatography	Operations 19, 20	pp. 80-87
	Procedure	pp. 215-224
2-Chloro-2-methylpropane	Operations 6, 11:	pp. 16-19, 37-39
	Procedure:	pp. 225-230
Octenes	All of above	
	Procedure:	pp. 231-236

[1] All experiments are Standard Scale.