

## ADVANCED ORGANIC LABORATORY

CHM 425  
Fall 2017

<b>Course Instructor</b>	Mindy Levine Beaupre 325F	mlevine@chm.uri.edu 401-874-4243
	Office hours are 11 AM-noon on Tuesdays and Thursdays, or by appointment.	
<b>Teaching Assistant</b>	Teresa Mako	tmako@mail.chm.uri.edu
<b>Course Meetings</b>	Tuesdays and Thursdays in the Beaupre Center The class will meet from 2 PM to 5 PM.	
<b>Textbook</b>	There is no formal text for this class. Course notes, handouts, and literature articles will serve as the text.	
<b>Course Goals</b>	The over-arching purpose of this course is the preparation of students for success in academic and industrial research laboratories. Three tasks that partially fulfill the aforementioned purpose: 1) The use of modern laboratory techniques 2) The incorporation of chemical literature into projects 3) The assignment of organic chemistry projects with real-world applications	
<b>Course Content</b>	Students will be required to complete laboratory experiments, keep accurate records, and analyze data. Students will also complete a detailed retrosynthetic analysis of target molecules. As time allows, the students will perform a small research project that is related to current research being performed here at URI. There will be no exams. There are no make-up labs scheduled. If a student must miss a lab for legitimate reasons, their grade will be based on an average of their grades from the other laboratory sessions. Detailed expectations for every part of this course are discussed in a separate handout.	
<b>Grading Scheme</b>	Laboratory Notebook / Data 40% Final Project (Progress & Report) 20% Techniques / Lab Citizenship 20% Final Literature Report 20%	
<b>Course Schedule</b>	A tentative course schedule is shown on the next page. This schedule is subject to change.	
<b>Academic Integrity</b>	Academic dishonesty will not be tolerated. It is an unforgivable offense. Students who have been caught cheating or misrepresenting their work will be subject to the disciplinary actions contained in the URI University Manual including failure of the assignment/exam and potentially culminating with expulsion from the University. <b>Every instance of academic dishonesty will be reported promptly to the Dean's Office. There are no exceptions to this policy under any circumstances.</b>	

**Course Schedule:**

#	Day	Date	Topic
1	Th	9/7	Course introduction; check-in
2	T	9/12	Experiment 1: Unknown separation and identification
3	Th	9/14	Unknown separation continued
4	T	9/19	Experiment 2: Anise extraction
5	Th	9/21	Anise extraction continued
6	T	9/26	Anise extraction continued and Scifinder introduction
7	Th	9/28	Experiment 3: Mannich reaction
8	T	10/3	Mannich reaction continued
9	Th	10/5	Experiment 4: Fluorophore synthesis
10	T	10/10	Fluorophore synthesis continued
11	Th	10/12	Fluorophore synthesis continued
12	T	10/17	Fluorophore synthesis continued
13	Th	10/19	Experiment 5: Fluorescent polymer synthesis
14	T	10/24	Fluorescent polymer continued
15	Th	10/26	Fluorescent polymer continued/ Energy Transfer
16	T	10/31	Experiment 6: MOF Project Day 1
17	Th	11/2	MOF Project Day 2
18	T	11/7	MOF Project Day 3
19	Th	11/9	MOF Project Day 4
20	T	11/14	MOF Project Day 5
21	Th	11/16	MOF Project Day 6
22	T	11/21	Independent Project Day 1
23	T	11/28	Independent Project Day 2
24	Th	11/30	Independent Project Day 3
25	T	12/5	Independent Project Day 4
26	Th	12/7	Independent Project Day 5

**12/12 Independent Project Report Due; Final Literature Report Due**