

## CHEM 3110 Lab II Syllabus (CRN 19351) Spring 2020

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<b>Instructor:</b>	Dr. Jianmei Cui
<b>E-mail:</b>	jcui@gsu.edu
<b>Time:</b>	8:00-12:45 pm Monday, lecture in PSC 362, Lab in PSC 355
<b>Office Hours:</b>	<u>PSC317, please email me for appointment</u>
<b>Required Texts</b>	1. CHEM. 3110 Lab Manual (available free during first lab) 2. Experimental Organic Chemistry by Wilcox and Wilcox
<b>Optional Texts</b>	Introduction to Spectroscopy by Pavia, Lampman and Kriz

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### Grading:

*Final Exam:	100 points
*Final Report	100 points
Quizzes, homework, notebook, attendance	<u>100 points</u>
	Total 300 points

\*Must be submitted to receive a passing grade.

**A+**: 96%, **A**: 90%; **A-**: 87%; **B+**: 84% **B**: 80%, **B-**: 77%, **C+**: 73% **C**: 70% **C-**: 66% **D** 64% **D-** 60% **F**<60%.

### Important Dates:

Jan. 13 <sup>th</sup>	Classes begin
Mar. 3 <sup>rd</sup>	Last day to withdraw with grade "W"
Apr. 13 <sup>th</sup>	Last day of lab, checkout
Apr. 20 <sup>th</sup>	Final Exam (8:00 am - 9:30 am), submission of final report and notebook (due at 8:00 am)

### Important Notes:

1. Attendance to lecture and lab will be recorded. Absences can result in loss of points and lower grades (Sign-in/out of lab required). Every effort should be made to arrive on time! Students should be responsible for the timely completion of all assignments, regardless of any reason of absence.
2. **No make-up quizzes, Notebook check, homework & final exam will be given!** If a student misses a quiz, notebook check, or homework will be counted as zero.
3. Please bring to my attention any discrepancies or issues within one week after your grade are posted. No change will be made on iCollege after this period.
4. **Bound lab notebooks are required at the first day of lab. All entries MUST be made in ink** at the time the experiment is being carried out. Notebooks must be submitted with the Final Report.
5. Safety glasses/goggles: Students must bring safety glasses/goggles and wear long pants & closed toe shoes on the first day as synthesis will begin immediately after check-in.
6. Failure to follow safety procedures will result in expulsion from that lab session with no make-up allowed and loss of credit.

## Department of Chemistry Policy Statement Regarding Student Integrity:

The Department of Chemistry follows the university policy on academic honesty published in the “Faculty Affairs handbook” and the “On Campus: The Undergraduate Co-Curricular Affairs handbook.” Any suspected offenses may be referred to the Department Chair for appropriate action. All tests taken must represent your individual, unaided efforts. To receive or offer information during an examination is cheating. The use of unauthorized supplementary materials during tests is also cheating. All laboratory work performed during this course must reflect your individual effort. Only original data obtained by your own laboratory experimentation are to be used, except when specifically authorized by your laboratory professor. Data from supplementary sources (handbooks, reference literature, etc.) must be clearly referenced (title, author, volume, page(s), etc.). Falsification or destruction of data constitutes cheating.

## Tentative schedule:

Changes and deviations from this syllabus may come and will be announced during class (quizzes, homework, and others).

<b>Lecture Dates</b>	<b>Lab #</b>	<b>Tentative Lecture Emphasis (labwork)</b>	<b>Reading Assignments (Read before lecture) pp. Wilcox &amp; Wilcox</b>
Jan. 13 <sup>th</sup>	1	Objectives of course (check-in; chalcone preparation), Safety Exam,	<b>HW1 Issue;</b> 3-24
Jan. 27 <sup>th</sup>	2	Recrystallization of chalcone, purity (m.p), Yield, Lit. Search	<b>Notebook Check 1;</b> <b>HW1 Due</b> 84-102 and lab manual
Feb. 3 <sup>rd</sup>	3	Overview of synthetic routes (Epoxide and/or dibromide preparation)	<b>Quiz1, HW2 Issue.</b>
Feb. 10 <sup>th</sup>	4	Overview continued; structure proof (Epoxide and/or dibromide preparation)	<b>HW2 Due;</b> 234-253 (IR)
Feb. 17 <sup>th</sup>	5	Structure proof continued (Isoxazole preparation)	<b>HW3 Issue,</b> 263-288 (NMR)
Feb. 24 <sup>th</sup>	6	<sup>1</sup> H-NMR (Complete preparations and purifications)	<b>Quiz 2 &amp; HW3 Due;</b> 254-262
Mar. 2 <sup>nd</sup>	7	UV Spectroscopy; Optional procedures (Begin optional procedures)	<b>Notebook Check 2.</b>
<b>Mar. 3<sup>rd</sup></b>		<b><u>Last day to withdraw and receive a W</u></b>	
Mar. 9 <sup>th</sup>	8	Optional procedures continued; <sup>13</sup> C NMR	<b>Quiz 3 and HW4 Issued</b>
Mar. 23 <sup>th</sup>	9	<sup>13</sup> C NMR (Synthesis of optional compounds continued)	<b>HW5 Issue;</b> 263-288
Mar. 30 <sup>th</sup>	10	<sup>13</sup> C NMR continued (Synthesis of optional compounds continued)	<b>Quiz 4 &amp; HW5 Due;</b>
Apr. 6 <sup>th</sup>	11	Format of Final Exam (Last day to begin a new synthesis)	<b>Quiz5</b>
Apr. 13 <sup>th</sup>	12	Format of Final Report Miscellaneous topics (Complete additional procedures and lab work)	7-8 (lab manual) <b>(Clean –up, check-out)</b>
Apr. 20 <sup>th</sup>	13	<b>Final Exam (8:00 AM-9:30 AM)</b> Submit Final Report and Notebook ( <b>Due 8:00 am</b> )	