

Chemistry 3110  
Spring 2018  
MM1

LECTURE: Tuesdays and Thursdays @ 12:00-12:50 pm., 218 NSC; Read assignments before lecture

LAB: Tuesdays and Thursdays, 1:00-4: 50 pm., 242 NSC, Note: lab meets after the lecture

- TEXTS:
1. GSU CHEM 3110 lab manual; supplied during 1<sup>st</sup> lecture/lab
  2. Experimental Organic Chemistry, Wilcox and Wilcox, Prentice Hall (Background text also used in CHEM 3100)
  3. The Organic CHEM Lab Survival manual by Zubrick (optional)

Instructor: Professor Maged Henary, 404-413-5566, [mhenary1@gsu.edu](mailto:mhenary1@gsu.edu)

OFFICE HOURS: **after or before lecture and/or by appointment.**

GRADING:

Final Exam*	100 points (Feb 20 <sup>th</sup> )
Final Formal Report*	100 points (Due Feb 20 <sup>th</sup> ).
Preparation, Quizzes and Lab Book*,**	(No makeup quizzes will be given) <u>100 points</u>
	300 points - maximum

TENTATIVE CUTOFFS:

A+ > 95%
A 90%
A- 87%
B+ 84%
B 80%
B- 77%
C+ 73%
C 70%
C- 66%
etc.

\*Must be submitted to receive a passing grade.

\*\*Notebooks must be picked up within one week after final grade deadline (after which time they will be discarded)

NOTES:

1. Final Exam on Tuesday, 20<sup>th</sup>, 2018
2. January 26<sup>th</sup>, 2018 is the last day to drop with a W.
3. Department of Chemistry Statement on Student Integrity applies to this course (see below).
4. Attendance to **lecture** and **lab** will be recorded. Absences can result in loss of points and lower grades (Sign-in/out of lab required).
5. Lab books must be recorded **in ink** at the time the measurements are made to be graded! Lab books must be bound.
6. Safety glasses\* are required and must be worn at all times.
7. Failure to follow safety procedures will result in expulsion from that lab session with no make-up allowed and loss of credit.

**\*The student must bring a pair of safety glasses/goggles to the first lab.** These may be purchased at the GSU Bookstore, the Georgia Bookstore, and most hardware stores. Students who are unable or forget to bring their glasses may **buy** a pair from their lab Coordinator by filling out a breakage form in the lab. Students who obtain glasses in this manner will pay for them at the time they check out of the lab. Students will not be allowed into the lab without their glasses/goggles.

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. The use of websites to copy mechanisms or data 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 permitted 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. All final reports must be original. Students are not allowed to use their cell phones or laptop computers during lectures.**

<u>Lecture &amp; Lab Dates</u>	<u>Tentative Lecture Emphasis (labwork)</u>	<u>Reading assignments</u> <u>pp. Wilcox &amp; Wilcox</u>
Jan 09	Safety, Objectives of course (check-in; Begin lab = chalcone preparation)	3-24 (read before lecture)
Jan 11	Safety Exam, Recrystallization, purity Lit. Search (recryst. of chalcone) Overview of synthetic routes (Epoxide and/or dibromide prep)	84-102 and <u>lab manual</u>
Jan 16	Overview continued; structure proof (Epoxide and/or dibromide prep)	234-253 (IR)
Jan 18	Structure proof continued (Isoxazole preparation)	263-288 NMR
Jan 23	Methods of UV spectroscopy (Finish preparations and purifications)	254-262
Jan 25	UV continued; optional procedures (Begin additional procedures) <b>Note: Jan 26<sup>th</sup>--Last Day to Drop with a "W"</b>	
Jan 30	Optional procedures (Continue additional preparations)	
Feb 01	<sup>13</sup> C NMR (Continue additional preparations)	263-288
Feb 06	<sup>13</sup> C NMR continued (Additional procedures)	
Feb 08	Evaluation; Miscellaneous topics (Finish additional procedures, complete lab work)	
Feb 13	Form of Final Report (Last day to begin a new synthesis)	36-39
Feb 15	Form of Final Exam (Additional procedures)	
Feb 20	Final Exam (Clean-up; proper disposal techniques, check-out)	

#### POLICY FOR WORKING IN THE LABORATORY:

Students in CHEM 3110 lab classes have permission to be in the laboratory other than their regularly scheduled lab period only when the lab is officially open and only to perform IR or Melting Point Determinations. No experiments are to be done outside of the schedule lab time. Experiments which require over-night heating may be turned off, allowed to cool and then secured [work-up (lab work) will not be allowed].