CHE 311L Section 14
Organic Chemistry Laboratory II
Spring 2009

Instructor : Prof. K.C. Russell
Office : Natural Science Center 350
Internet via: http://www.nku.edu/~russellk
Course web page: http://www.nku.edu/~russellk/311l.html
e-mail : russellk@nku.edu
Phone : (859) 572 - 6110

Requirements: CHE 310 and 310 L are prerequisites for this course.
CHE 311 is a pre/co-requsite for this course.
If you have not passed CHE 311 or are not currently enrolled in CHE 311 you may not be enrolled in this course. This applies to the entire semester.

Text: Mohrig *et al*. "Techniques in Organic Chemistry"
Organic Chemistry Laboratory Supplement – available on line

Equipment: Safety Glasses
Bound Laboratory Notebook

Class Times: 9:25 am - 12:25 pm, Tuesday. SC 465

Office Hours: M 9:00 – 10:00 am; T 1:00 – 2:00 pm; W 10:00 – 11:00 am
By appointment. I have an open door policy. Call or email…

Student Learning Outcomes: At the end of this lecture course students should be able to

1) explain how organic compounds are synthesized, purified, and characterized in the laboratory.
2) demonstrate the ability to carry out experimental protocols using modern instrumentation and methods.
3) compile, critically evaluate, and interpret scientific information gathered experimentally.
4) effectively communicate scientific information through written means.
5) apply computer technology and other technologies in the comprehension, interpretation, and presentation of laboratory data.

Grading Policy: Grading of your lab reports will be based on your write-ups (correctness, completeness, clarity, brevity, sentence structure, style, and format), observations, conclusions, calculations, and yield and purity of products.
Each lab report will be worth 25 points per week. A penalty of 2 points per day will be docked for late reports.

Severe penalties will be instituted for incorrect reaction headers and significant figures!

Grading Policy: (cont). Your grade will be based on the following scale:

Assignment	Value	Date
Reports & Quizzes & Homework	44 %	
	8 %	
Mid-term exam	16 %	March 15, 2008
Final Exam	32 %	April 26, 2008

Grading Scale

Grade	Score
A	83.0 –100 %
B	71.0 – 82.9 %
C	56.0 – 70.9 %
D	40.0 – 55.9 %
F	0 – 39.9 %

Make ups: **No make-up labs will be given.** Arrangement can be made to do a lab in another section doing the same experiment. However, approval from all instructors involved must be obtained in advance.

Regrades: Any corrections in grading must be addressed within 48 hours of when a report, quiz or exam returned in class. Regrades must be requested in writing using the on-line regrade form. *You must clearly explain all errors and provide support for why your answer is correct*. Requests not giving sufficient explanations will be dismissed. When a regrade is requested, the entire exam, quiz or report may be regraded.

Expectations: It is expected that each student enter the lab with a very good understanding of the theory behind the lab experiment and sufficient knowledge of the procedure so that he or she can begin working immediately. Students are also expected to arrive in lab with the outline of the experimental procedure written in their lab notebook. You will not be allowed to use your textbook during lab.

It is anticipated that each student will know how to set up and perform the basic techniques (simple distillation, melting points, extraction, and recrystallization) and carry out standard calculations (% yield, volume to mol conversion, concentration to mol, etc.) in organic chemistry lab.

The pre-lab lecture will consist of a very brief review of the theory behind the experiment, safety features, and changes in the experimental procedure, if any.

Lab notebooks: The actual experimental details with for a given experiment will be recorded using the red-blue-black color scheme beginning on the page immediately following your protocol. In addition to the protocol you are expected to have the chemical reaction written in your lab notebook when you arrive.

The actual procedure is to be recorded as the experiment is being performed, written in the passive voice. If you make an error in recording information, cross it out with a single line. You must have an instructor sign your lab notebook before you leave.

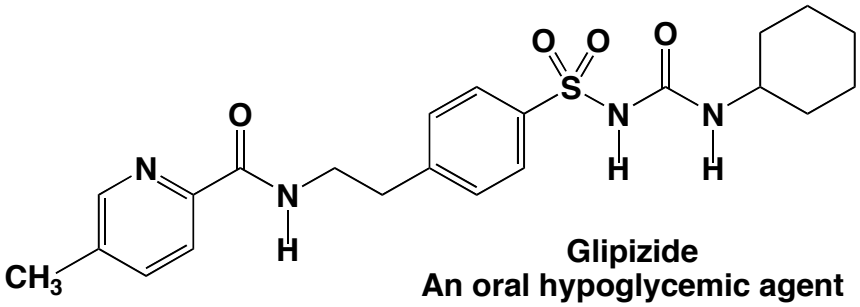
Lab reports: Lab reports (data sheets and lab notebook pages, in that order) will be due at the beginning of the lab period following the experiment. Additional time may be permitted if melting points and/or masses are required to finish your report. However, it is expected that all questions, with the exception of those requiring additional data, will be answered *before* you arrive.

Hints: (How to avoid point loss on your reports)

- Correctly and completely use red-blue-black color scheme
- Correct number of significant figures including accuracy of measurements
- Conclusion to each experiment recorded in lab notebook
- Clear sample calculations

Academic integrity: The work in this course is subject to The ***Northern Kentucky University Student Honor code***. The Honor Code is a commitment to the highest degree of ethical integrity in academic conduct, a commitment that, individually and collectively, the students of Northern Kentucky University will not lie, cheat, or plagiarize to gain and academic advantage over fellow students or avoid academic requirements.

The ***Northern Kentucky University Student Honor code*** will be strictly enforced in this class. Cheating is an extremely serious offense and will not be tolerated! Any unauthorized assistance on an examination, quiz, homework assignments or lab report is considered cheating. The use of previously graded lab reports (other than your own), homework assignments, or the copying of data sheets from other students to answer questions is considered cheating. In accordance with the *Code of Student Rights and Responsibilities*, faculty members have the right to determine actions to be taken when a student is caught cheating. Penalties for cheating can range from but are not limited to scores of zero on individual assignments or exams to expulsion from the University and does include failure of the course.



Glipizide
An oral hypoglycemic agent

Note: This syllabus is subject to change.

Students are responsible for understanding all items on the syllabus. Any items not understood must be brought to the attention of the instructor within the first two weeks of class.

Last revised : January 9, 2008

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Schedule of Experiments

Section 014 – Tuesday, 9:25 AM – 12:25 PM

#	EXPERIMENT	DATE
1	CHECK-IN Preparation of Luminol	Jan 13, 2009
2	Separation and Spectroscopy (P)	Jan 20, 2009 Jan 27, 2009
3	Ether Synthesis	Feb 3, 2009
4	Aldehydes and Ketones	Feb 10, 2009 Feb 17, 2009
5	Hydrolysis of Benzonitrile	Feb 24, 2009
6	Acetylation of Benzoin	Mar 3, 2009
	Spring Break	**Mar 9-13, 2009**
	Midterm	**Mar 17, 200**
7	Multistep Synthesis	Mar 24, 31 & Apr 7, 2009
8	Aldol Condensation	Apr 14, 2008
9	Wittig Synthesis	Apr 21, 2008
	Final Examination (cumulative)	**Apr 28, 2008**
	Checkout	**Apr 28, 2008**

P = partner

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