CHEM 2312, Summer 2017-Study Abroad in Lyon, France
ORGANIC CHEMISTRY – II

INSTRUCTOR
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Course Website:
Please check the course t-square site for lecture notes, homework assignments, practice exams, announcements, etc.

TEXTBOOKS
"Organic Chemistry", 11th or 12th edition, by T.W. Graham Solomons and Craig B. Fryhle and "Study Guide and Solutions Manual to Accompany Organic Chemistry".

OPTIONAL SOFTWARE
WileyPlus (https://www.wileyplus.com/WileyCDA/) -online textbook and tutorials are available.

SCHEDULE
The course will include twelve 3.0 hour lecture periods, a field trip to the High Field NMR Centre and local chemical company, 2 midterm exams, and a final exam.

POLICIES, PROCEDURES AND GRADES
GRADES

Exams 1&2	Mol.Structure, Conjugation, Aromaticity and Reactions of Arenes	200 points
Exam 3&4	Aldehydes/Ketones and Acyl Derivatives, Amines	200 points
Homework		100 points
Final Exam Part 1: Exam 5		100 points
Final Exam Part 2: ACS Final Exam		200 points

The lowest score (i.e 100 points) from exams 1,2,3,4,5 or HW will be dropped. Thus, the course will be graded on the basis of 700 points:
88% (616 points) will guarantee an "A"
75% (525 points) guarantees a "B"
65% (455 points) guarantees a "C"
55% (385 points) guarantees a "D"

LECTURE ATTENDANCE
You are strongly encouraged to attend lectures.

REGRADES

If you want any work regraded you must make a request and return the assignment within 2 days to the instructor. Work will not be regraded after this deadline.

CLASS NOTES
Notes for each topic should be downloaded from the web (as PDF files) and printed prior to the first lecture dealing with the material. Topics correspond fairly closely to the chapters, with a little reorganization. *These notes are not designed to be comprehensive.* In fact, they are specifically designed to be incomplete. They are designed to serve as the basis for lecture notes, not as a replacement for attending lectures. The notes should minimize the use of lecture time for information transfer, and allow time to work problems in class.

HOMEWORK (100 points)
Homework will be assigned. Late assignments will not be accepted.

OTHER PROBLEMS (not graded)
You should work the problems in each reading assignment *as you get to them*. Problems at the end of the chapter are listed on the class notes (top right hand corner): You should work through as many of these as possible. These will serve as a guide for the types of questions to appear on examinations. Do not submit answers to these problems, they will not be graded.

EXAMS: SCHEDULE, MAKE-UPS AND DROPS
You must take the exam at the assigned lecture time. *Make-ups can only be given if advance notification is given or upon presentation of a doctor's note*. Exams not made-up, for any reason, will receive a score of zero.

Since this course is offered as part of a study abroad program, dropping the course is not permitted. In addition, Institute policies regarding Final Instructional Class Days and Reading Periods are not applicable. Be sure to review the academic course schedule for this 8-week study abroad program.

MATERIAL COVERED/STUDENT RESPONSIBILITIES
You are responsible for all material presented in lectures and in assigned readings. You are also responsible for announcements made in class, which will also be posted on the www page or distributed by email. You must check the web site and you *mail.gatech.edu* account on a regular basis. Note: There are potential problems associated with automatic forwarding of messages from *GT email* to other email addresses; check your *email* account even if you have it set up to forward email elsewhere.

WORKING IN GROUPS
Most learning takes place *outside* of the classroom. Although lectures should put things in perspective, working through the textbook, and solving the problems is when you will come to terms with the material. I encourage you to work together on these reading and problem assignments. For most students, it is actually unwise to try to work alone. Although you might study in groups, remember that you are ultimately responsible for your learning. Everybody can benefit from team work. If you are struggling with the material you stand to learn a lot; if you are an "Organic Whiz" you also stand to learn from the challenge of presenting your understanding to others. You will learn through teaching. Office hours are available for individual instruction. No *new* information will be introduced during office hours or problem solving sessions.

GRADING
Although grades will be assigned based on a numerical score which judges attainment on exams. The course is structured such that if you show a desire to learn, put *the effort in, and have some intellectual ability, you can get the grade you want. With this in mind, please take the time to read the Grades, Expectations and Minimum Requirements section, and decide what you want from the course.*

"WORD"
If you want copies of old exam….see the course website! *All* of the problems on the exam will be similar to those in the book or old exams. The *processes* by which you can solve the problems will be *exactly* the same as those in the book/old exams/homework. Occasionally, an exam question may be taken directly from the one of these sources. *You must understand the processes required to answer assigned problems to do well on*

exams. The best use of these practice exams is to study for the exam, then try the practice exam, in one hour, undisturbed. THEN look at the answers, gauge your success, and assess your needs for further study.

CANCELLATION OF CLASSES
If class is cancelled, a make-up lecture and any change in assignment deadlines will be announced.

TIME COMMITMENTS
Typically, for each 1hr lecture you should aim to put in *at least* another two hours of your own time. You will need to spend more time preparing for exams. Some students will require more, some less.

GRADES, EXPECTATIONS AND MINIMUM REQUIREMENTS
(adapted from J. H. Williams in *The Teaching Professor*, Aug 1993)
"D" -55%- Some demonstration of detailed knowledge of organic reactions.
“C” -65%- Detailed knowledge of structure and bonding, be able to show movement of electrons during reactions, know individual organic reactions.
“B” -75%- Requirements for a “C”, plus some demonstrated success of multistep synthesis of molecules, some success showing movement of electrons for multistep reactions.
“A” -88%- Requirements for a “B”, plus: write consistently good complete pathways for multistep reactions based on simple mechanistic concepts showing flow of electrons in each step. Propose good syntheses for molecules using a string of individual organic reactions.
““A” students have virtually perfect performance. Their commitment to the class resembles that of the teacher. They always read the assignment, and their attention to detail is such that the occasionally catch the teacher’s mistakes (we all make them!). An
“A” student is CREATIVE, COMMITTED, ORGANIZED, and CURIOUS, has a RETENTIVE MIND (and exercises it), has a WINNING ATTITUDE, and SHOWS INITIATIVE.”

If every student gets 88+%, everyone gets an “A”
SOME STUDY TIPS
Understand and *Rationalize*. Read the text, prepare your own summaries. Typically each section in the text can be generalized in one or two lines or equations. Read the chapter summaries. Do you understand each point? Can you apply each concept? Work as many of the problems in the book as possible. Do them in order. If you have no trouble with the first few parts of a multi-part question, you might want to pick a few of the latter parts at random. Study in groups. ***Keep up to date! Ask Questions!!***

GEORGIA TECH HONOR CODE
All students are expected to abide by the Georgia Tech Honor Code (www.honor.gatech.edu)

CHEM 2312 Summer 2017		
ORGANIC CHEMISTRY - II		
Length of Lecture: 3 hours		
Topic	**Prelecture reading**	**Lecture #**
Conjugated Systems and Aromaticity	13.1-10	1
Conjugated Systems and Aromaticity	14.1-11	2
Reactions or Arenes	15.1-9	3
Reactions or Arenes	15.10-15, 20.5-8	4
Exam 1&2		
Aldehydes and Ketones	12.1-4, 16.1-6	4
Aldehydes and Ketones	16.7-9, 12.5-9	5
Aldehydes and Ketones	16.10-15	6
Acid Derivatives	17.1-9	7
Acid Derivatives, Amines	17.10-12, 20.1-4, 11-13	8
Exam 3&4		
Enols and Enolates	18.1-8	9
Enols and Enolates	18.9-11, 19.1-5	10
Enols and Enolates	19.6-9	11
Enols and Enolates/Review	Problems	12
Final Exam (Exam 5 & ACS Multiple Choice)		