3410 Course Syllabus Spring 2014

Honors Organic Chemistry 2

Chemistry 3410
M W F: 1:30-2:40 pm
Room: **Sparks 321**
Text: "Organic Chemistry", 8th Edition, By John McMurry.

Chapters 14 through 26 will be covered at a rate of approximately one chapter per week.

Instructor: Dr. Jun Yin

Office: NSC 571

Office hour: Monday 2:45-3:45pm

E-mail: junyin@gsu.edu

Send emails from your GSU email account only, and the course title must be in the subject of the email.

Teaching assistant: Han Zhou

Office: NSC 530

Office hour: Friday 5-6pm

Email: hzhou15@student.gsu.edu

Tentative lecture schedule (may be changed as the course progresses)

Week	Date	Chapter	Topic	Quiz
1	January 13	14	Conjugated systems	
	15	14	UV spectroscopy	
	17	30	Cycloaddition reactions	
2	20		***MLK Day, no class***	
	22	30	Sigmatropic rearrangements	
	24	30	Review	Quiz 1 (§14)
3	27	15	Benzene and aromaticity	
	29	15	Spectroscopy of aromatic compounds	
	31	15	Review	Quiz 2 (§30)
4	February 3	16	Electrophilic substitution on benzene	
	5	16	Nucleophilic subst., reduction, oxidation, etc	
	7	16	Review	Quiz 3 (§15)
5	10	17	Alcohol and phenol, reactions	
	12	17	Alcohol and phenol, synthesis	
	14		**Midterm exam 1**	
6	17	18	Ether and epoxide, reactions	
	19	18	Ether and epoxide, synthesis	
	21	18	Review	Quiz 4 (§17)
7	24	19	Aldehyde and ketone, reactions	
	26	19	Aldehyde and ketone, synthesis	
	28	19	Review	Quiz 5 (§18)
8	March 3	20	Carboxylic acid and nitrile, reactions	
	5	20	Carboxylic acid and nitrile, synthesis	
	7	20	Review	Quiz 6 (§19)
9	10	21	Carboxylic acid derivatives, reactions	
	12	21	Carboxylic acid derivatives, synthesis	
	14		**Midterm exam 2**	
10	17		***Spring break, no class***	
	19		***Spring break, no class***	
	21		***Spring break, no class***	
11	24	22	Carbonyl α-substitution, enolate formation	
	26	22	Reaction of enolates	
	28	22	Review	Quiz 7 (§21)
12	31	23	Carbonyl condensation, aldol reaction	
	April 2	23	Claisen condensation, Michael addition, etc	
	4	23	Review	Quiz 8 (§22)
13	7	24	Amines, reactions and synthesis	
	9	24	Heterocycles	
	11	24	Review	Quiz 9 (§23)
14	14	25	Carbohydrates, structures	
	16	25	Carbohydrates, reactions	
	18		**Midterm exam 3**	
15	21	26	Amino acids, peptides and proteins	
	23	26	Amino acids, peptides and proteins	
	25	27	Lipids *(maybe)*	Quiz 10 (§26)
16	28	28	Nucleic acids *(maybe)*	
	30		*No class*	
	May 2		**Final exam**	

Grading scheme: THREE midterm exams will be given during the Semester. The combined scores from the three exams will count **60%** of your final grade. **TEN Short quizzes** will be given, the lowest of which will be dropped, and they will contribute **10%** to your final grade. There will be an **ACS final exam**, which will count **30%** of the final grade.

No makeup midterm exam, final exam or quizzes will be given. You have to take the exams and the quizzes during the predefined time with the whole class. Missed examinations will be recorded as a **zero**.

Homework: Each week a practice problem set will be posted on D2L. You need to work diligently on the problem sets after the lectures. The answers to those problem sets will be posted online in the following week. Your answers to the problem sets will not be collected for grading. But you have to work on those problem sets and understand them well to increase your chance to do well in the exams and the quizzes.

To receive a passing grade in this course, the student MUST

1) take all required exams
1) take the final examination

Note***The professor reserves the right to move ANYONE during the Examination for ANY REASON without explanation. If you are asked to relocate gather your test and move to the newly assigned seat.

Understand that the only way to master the material in this course IS TO PRACTICE. If you run out of material to practice, please come to see me and I will make sure that you get more practice problems.

Policy on electronic devises: All students must use a standard non-programmable scientific calculator. Programmable (Graphing) calculators, cell phones, ipads, laptops, (use your imagination) cannot be used on quizzes and exams.

Cell Phones: In consideration of your classmates, turn off all sound alerts during every lecture and examinations. If you must have the cell phone during the daily lectures, please set it to ring on vibrate mode (silent). If you need to be on call during an exam, please inform the instructor and leave the phone with the instructor.

Class attendance and preparation: Students are responsible for class preparation and for any material presented in the course of the lectures *whether or not it is contained in the textbook*. Chemistry is a *highly* structured course, with each new topic based on others previously developed. Thus it is *critical* for students to keep *consistently* up-to-date in their readings and assignments. To fall even one class period behind is to risk considerable difficulty in mastery of future material. Therefore students should

1) review previous material, especially if it was not perfectly understood.
2) complete reading assignments *before* the lecture in which the topics are covered, or at least immediately after the lecture.
3) complete assigned problems and exercises on time, with an emphasis on mastery of

concepts and principles involved rather than looking for a formula that will give the expected answer (*remember that the question can be asked in a different way and not just with different numbers!*)

If you have concerns regarding the grade assigned to your exams you must submit your answer sheet for re-grading along with a written explanation of the concern. This submission must be made within one week of the date the exam was returned.

Class Attendance:

Students are expected to attend all lecture classes. Students are required to take all quizzes, lecture exams and the course final exam.

Note: Sometime after the mid-point of each course (an exact date will be set by the Provost or his designee), the University now requires faculty members to: 1) Give an F to any student who is on the course roll but no longer attending class and 2) Report the last day the student attended class or turned in an assignment. Students who are withdrawn may petition the Departmental Chair for reinstatement into their classes. Students who withdraw themselves by the mid-point of the course will receive a W under this policy.

Some Examples of Unacceptable Student Conduct:

- Not following the testing procedures as instructed.
- Talking while your professor is lecturing.
- Arguing with the professor about student conduct.
- Not sitting up straight with paper directly in front of you during an exam.
- Not keeping your scantron or exam papers covered during an exam.
- Using a disrespectful tone of voice, harsh words or profanity.
- Making inappropriate gestures of any kind.
- Leaving class before the lecture is over.
- Letting your cell phone ring audibly during a lecture or exam.
- Having a cell phone available during a quiz or test.
- Not having your student ID for a quiz or test.
- Arriving late for lecture or for an exam.
- Allowing your laboratory data or answers to be copied.

Chemistry Department Policy on Student Conduct and Integrity: The *Georgia State University Policy on Academic Honesty* is in force in this course. This includes but is not necessarily limited to infractions in the area of *plagiarism*, *cheating on examinations*, *unauthorized collaborations*, *falsification*, and *multiple submissions*. This policy is published in *On Campus: the Student Handbook*, which is available to all members of the university community.

All examinations must represent your individual effort, with no unauthorized aid. To either *give* or *receive* unauthorized information during an examination is cheating, as is the use of *any* unauthorized supplementary material. In addition all laboratory work performed in conjunction with this course must represent your individual effort. Only original data obtained by your own *in-laboratory* experimentation are permitted to be used, except when *expressly authorized* by your laboratory instructor. Data from supplementary sources, handbooks, reference literature, etc. must be *clearly referenced* (title, author, volume, pages(s), etc.). Falsification or destruction of data constitutes cheating as well. Conduct disruptive of class, examinations, or laboratories *or* falsification or destruction of information related to chemistry courses will be taken as a violation of the policies of the Board of Regents of the University System of Georgia and the Georgia State University Student Code of Conduct, Section 6.0. Any suspected offenses may be referred to the Chairman of the Department or the Dean of Students for appropriate disciplinary action.

The foregoing provides a general plan for the course, deviations from which may be necessary. The instructor will announce any such changes in class.

*Deviations from this syllabus may be required.

*Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance by the Office of Disability Services of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which an accommodation is sought.

*Your constructive assessment of this course plays an indispensable role in shaping education at Georgia State. Upon completing the course, please take time to fill out the online course evaluation.