

DEPARTMENT OF CHEMISTRY

Organic Chemistry II (CHEM 2410; CRN 89299/92373; 3 credits) Fall 2017

Instructor: Dr. Joan Mutanyatta-Comar
Office: PSC 381; Tel.# 404-413-6544
E-mail: jmutanyattacomar@gsu.edu
Office hours: MW: 9:30 am – 12:00 noon.
Any other time by appointment.

Lecture: MWF 8:00 am – 8:50 am. **LS 102**
Breakout Session: MWF 9:00 am – 9:20 am. **LS 102**

Required Text: 1. “Organic Chemistry”, 9th Edition, By John McMurry
Chapters **13-24** will be covered at a rate of approximately **one chapter per week.**

Purchase from GSU bookstore or online

**2. Preparing for Your ACS Examination in Organic Chemistry:
The Official Guide, ISBN 0-9708042-1-0**

**Purchase from GSU bookstore or from GSU Chem club
(Courtland N, Room 219)**

**Optional Text: 1. Organic Chemistry I & II: A Student Workbook”,
ISBN # 978-0-7575-8271-4, By Keith O. Pascoe**

**2. Organic Chemistry II as a Second Language, second semester
topics, 4E, by David Klein**

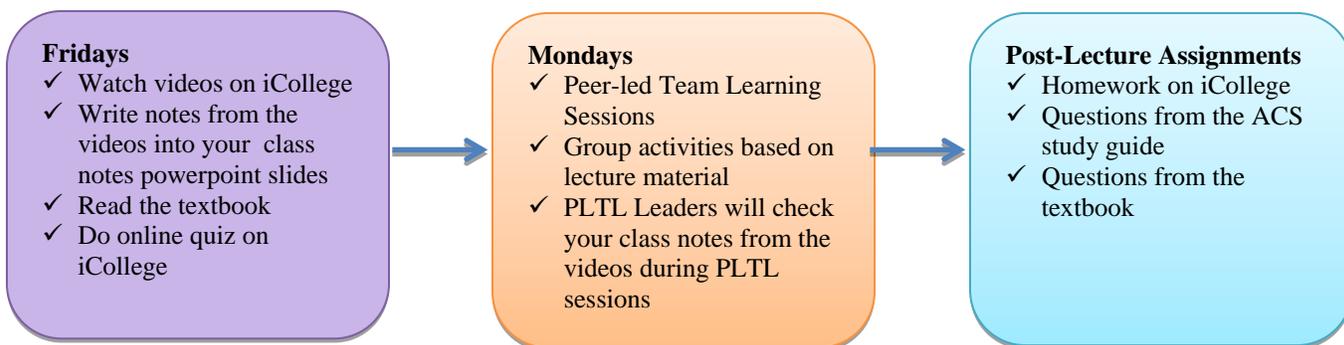
**ISBN 978-1-119-11065-1
Purchase online**

Prerequisite: Organic Chemistry 1 (CHEM2400) with a grade of “C” or higher.

Communication:

1. Please send emails to me from your GSU e-mail account (e.g., jcole1@student.gsu.edu). Please put the course name in the subject of your email. **(Do not email me from iCollege)**
- 2. Please check iCollege daily for class announcements and updates**

This course is blended! Here is how it works:



Note:

- ✓ Please plan your time management carefully so that you come prepared to each PLTL session ready for class activities.

Course Introduction:

Organic chemistry has great relevance for all students in STEM disciplines. It is important for biologists and health professionals because nearly all of biochemistry involves the organic chemistry you'll learn in this class. For chemical engineers, understanding the properties of organic molecules and how reactions occur is critically important to understanding the processes in an industrial plant. Even if you don't buy the relevance of this class to your field, organic chemistry teaches important problem solving skills that are directly relevant to all scientists, engineers, and health professionals.

Learning Outcomes: Students in this class will:

- Gain an understanding of how to determine the structure of organic molecules using ^1H and ^{13}C NMR spectroscopy.
- Demonstrate understanding of the properties and reactivity of important functional groups including conjugated π -systems, aromatic compounds, alcohols, phenols, ethers, epoxides, thiols, sulfides, nitriles, amines, and carbonyl compounds.
- Be able to write detailed mechanisms for important reaction classes: electrophilic aromatic substitution reactions and carbonyl nucleophilic additions, substitution and condensation reactions.
- Analyze and plan multi-step syntheses of organic compounds.
- Apply knowledge gained from class to solve problems.
- Demonstrate inquiry skills that will enable them to formulate questions and to develop explanation of organic concepts.
- Demonstrate confidence as independent thinkers and life-long learners.

Grading Scheme:

- **Four in-course exams** will be given during the semester. At the end of the semester, the lowest grade will be dropped. The average score from the remaining three exams will count **55%** of your final grade. You are strongly encouraged to take all four 'in-course' exams.
- **Eleven online quizzes** will be given during the semester. At the end of the semester, the lowest grade will be dropped. The average score from the remaining ten quizzes will count for **10%** of the final grade. You are strongly encouraged to take all eleven quizzes.
- **Homework + PLTL session participation grades** will count for a total of **5%** of the final grade.
- There will be a final exam (**ACS National Exam**) which will count **30%** of the final grade. The final ACS exam will also have several questions from material covered in "**Organic 1**"

Tentative Letter Grades:

A+	=	>95%
A	=	90%
A-	=	88%
B+	=	84%
B	=	80%
B-	=	78%
C+	=	75%
C	=	69%
C-	=	65%
D	=	61%
F	=	< 54%

Note: CHEM 2410 is a prerequisite for Biochemistry. A grade of "C" or higher in CHEM2410 is required for registration into Biochemistry (CHEM4600).

Important Dates:

Aug. 21 th	Classes begin
Sept. 4 th	Holiday (Labor Day)
Oct. 10 th	Last day to withdraw with grade "W"
Nov. 20-25 th	Thanksgiving Break
Dec. 4 th	Last day of class
Dec. 6th	Final Exam: Wednesday, December 6, 2017 (8:00 am -10:00 am), LS 102

Tentative Teaching Schedule:

Note: This calendar is subject to change with prior notice, at the instructor's discretion

Wk. #	Wk. Of:	M	W	F
01	Aug 21	L	L	L + Online Q
02	28	PLTL	L	L + Online Q
03	Sept 04	H	L	L + Online Q
04	11	PLTL	L	Exam 1
05	18	L	L	L + Online Q
06	25	PLTL	L	L + Online Q
07	Oct 02	PLTL	L	Exam 2
08	09	L	L	L + Online Q
09	16	PLTL	L	L + Online Q
10	23	PLTL	L	Exam 3
11	30	L	L	L + Online Q
12	Nov 06	PLTL	L	L + Online Q
13	13	PLTL	L	L + Online Q
14	20	H	H	H
15	27	PLTL	L	Exam 4
16	Dec 04	L + Cummulative Online Q	Final Exam	-

PLTL = Peer-led Team Learning Sessions
Cummulative Online Q = Organic I&II material

Q = Quiz H = Holiday
L = Lecture

Notes:

- If you miss an exam for any reason that score will be dropped automatically. **NO MAKE-UP EXAMS WILL BE GIVEN.** Students missing an exam will be expected to submit a written note explaining why the exam was missed. A student will not be excused from more than one test for any reason.
- 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.**
- Students need to show their GSU Panther I.D. card when taking exams.
- The instructor reserves the right to assign seating during exams.
- Final grades are only available on PAWS/GoSolar. They will not be posted on iCollege. Please note that grades cannot be given to students by phone or email.**

Class Preparation and attendance: Students are **expected** to attend all lectures. As a courtesy to your fellow students, please arrive on time and do not leave during the lecture. Students are solely responsible for the timely completion of all assignments, absence being no excuse. **Suggested reading assignments given during the course of a lecture should be completed before the next lecture.**

Chemistry Departments Student Integrity Policy: 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”. All tests taken must represent the student’s individual, unaided effort. To receive or offer information during any examination will be considered cheating.

Any suspected offense may be referred to the Department’s Chairman for appropriate action.

Class will never be cancelled unless an official from the Chemistry Department gives the class personal notification. Don’t assume a note to be enough without checking the Department’s office.

The University requires that faculty members must, on a date after the mid-point of the course to be set by the Provost (or his designee)

1. Give a **WF** to all students who are on their rolls but are no longer taking the class and
2. Report the last day the student attended or turned in an assignment. Students who are withdrawn may petition the Departmental Chair for reinstatement into their classes.

NOTE:

- ✓ Cell phones and laptops are allowed during lectures **BUT NOT** during exams.
- ✓ **Successful students do not allow technology/social media to distract them during class.**
- ✓ Students are requested **not** to bring cellular telephones and/or pagers to exams. Persons violating this request will be asked to leave the room.
- ✓ No programmable calculators will be allowed in the classroom.

COURSE ACTIVITIES:

Peer-Led Team Learning (PLTL)

Peer-Led Team Learning (PLTL) is a program designed to provide an active learning experience in which students can gain the skills and confidence to be successful learners in Organic Chemistry and, potentially, future courses. In weekly PLTL sessions, small groups of students will work together to solve problems. An undergraduate PLTL leader who has training in group dynamics and mastery of course content will lead them.

In this course, a group of no more than 20 students will meet on Mondays (see syllabus) with their peer leader in an assigned classroom. The leaders will take attendance and check the class notes based on the assigned video watched prior to the PLTL session. Students will work on group activities.

Attendance:

You will attend PLTL sessions on Mondays (see Tentative Schedule). PLTL sessions are mandatory. If you miss a session you will receive a grade of "0" for that week. Three or more unexcused absences will result in a grade "0" for PLTL.

Tardiness:

If you are more than 10 minutes late for a session, you will earn "0" points for the day. You must arrive to your PLTL session on time to participate in group activities.

Leaving Early:

There are no excuses for leaving early. Leaving early will reflect in a student receiving "0" points for the day, unless you have a reason that is deemed excusable.

Point System:

Each week your PLTL Leader is required to give you points based on whether you came prepared and whether you participated.

The point breakdown is as follows:

- ✓ **5 max. points** for bringing your written class notes from assigned video to be watched prior to the PLTL session.
- ✓ **5 max. points** for discussion = students did not participate (0 points), students decently participated in the PLTL discussion (3 points) or student participated exceptionally (5 points).
- ✓ Total possible points per session: **10 points**

Conduct:

You must be respectful to your PLTL Leader and your peers as according to the "GSU Student Handbook Code of Conduct". Inconsiderate, disrespectful, dishonest, or disruptive behavior, as the instructor or your fellow classmates perceive it, or as is described in the Student Handbook, is unacceptable for adults in this course. The PLTL leaders reserve the right to ask you to leave or have you removed if such behavior is present. Such behavior may bring about official disciplinary procedures as outlined in the Student Handbook.

Cheating will NOT be tolerated! If you forge another student's signature, that is not only cheating, but against the law and consequences will ensue. Also, if you provide fake documentation to excuse an absence there will be severe consequences as decided by your instructor for your lecture course.

Athletes:

You MUST bring proper documentation to your instructor, BEFORE you leave for a game/tournament to be able to make-up the work for that week. Tournaments are scheduled months in advance so there is no excuse to not have provided proper documentation before the event.

Keys to success in organic chemistry:

You have all successfully completed Organic Chemistry I (CHEM2400), so you have an idea of what it takes to succeed in Organic Chemistry II (CHEM2410).

Students who do well in organic chemistry possess the following characteristics:

- **Attend class:** There is a very good correlation between class attendance and how well a student will do in this course. Some students may be able to teach themselves from the book, but generally, students who struggle most rarely come to class.
- **Are prepared:** You will get the most out of class if you have read the sections to be covered that day (see class notes and learning outcomes on iCollege)
- **Ask questions:** If you don't understand something, ask the instructor in class, after class, or during office hours.
- **Keep up:** This course is cumulative and covers a lot of content. You will find it much easier if you study a little bit each week, or even better after each lecture. Study however you find most useful: flashcards, review outlines, practice problems, reaction lists, etc.
- **Practice, Practice, Practice:** Organic chemistry, like any skill, is best learned by doing. The best possible advice is to work as many example problems as you can find. Start with assigned workshops, questions from the textbook, recommended workbook, SI worksheets, but also look for other sources of problems if you need to. When working problems, make sure that you understand why the correct answer is the right one.

- **Learn fundamental concepts:** Organic chemistry is very difficult to learn by rote memorization. If you understand the concepts, you will find it much easier to keep track of the large amount of information, and more importantly be able to apply it on the tests. Again, practice, practice, practice!!!.
- **Get help early if they need it:** If you get behind, it can be very difficult to catch up. If you feel you are falling behind, increase your effort. Go to the Chemistry Tutoring Center (CTC, in Courtland N, room 217). Also consider getting outside help. I am happy to work with you during office hours. If you feel you need more extensive help, consider hiring a tutor. I can recommend some excellent tutors but a list of active tutors is also available from the Chemistry Department web page.
- **Collect all returned graded exams.** They go over the questions they got wrong and ask the instructor for clarification. This way they don't make the same mistake again.
- **Make extensive use of FREE support services:** office hours, PLTL sessions, SI sessions, Chemistry Tutoring Center (Courtland N, Room 217), Student Support Services (SSS)-STEM (contact: Deidre Steed, dsteed1@gsu.edu, 404-413-1682, in person: 145 sparks Hall) .

CHEM 3411 – starts 2nd week of classes

This is a problem solving class to help you with the lecture. The credits count toward your GPA but not towards your degree. Grading is based on your attendance. [Check GoSolar for more details.](#)

***Students with Disabilities:** 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.

***A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent for the observance of a religious holy day shall be allowed to take an exam or complete an assignment scheduled for that day within a reasonable time after the absence.**

***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.**

***Deviations from this syllabus may be required.**