CHEM 343 section 005 Syllabus

Introductory Organic Chemistry

COURSE INFORMATION

Introductory Organic Chemistry
CHEM 343 005(3.0Credits)
Fall 2018-2019 [1192]

Description

Chemistry 343 covers fundamental aspects of organic molecular structure, including stereochemistry, and introduces basic themes in organic reactivity. It is the first semester of a two-semester organic chemistry sequence. Chemistry 345 is the second course in the sequence. Class is for students expecting to take two semesters of organic chemistry. Enroll Info: None

Prerequsite(s)

CHEM 104, 109, or 116

Breadths

P - Physical Science

Instruction Mode

Classroom Instruction

Department: CHEMISTRY
College: Letters and Science

Canvas Course URL

https://canvas.wisc.edu/

2018-2019 Fall [1192]
Term Start Date: Wednesday, 5-Sep-2018 **Term End Date:** Wednesday, 2-Jan-2019

Location and Schedule: Educational Sciences 204 MWF 1:20 PM-2:10 PM
CRN: 224002767

How the Credit Hours are Met

The credit standard for this course is met by an expectation of a total of 135 hours of student engagement with the course's learning activities (45 hours per credit), which include regularly scheduled lectures delivered by the instructor, regularly scheduled discussion sections led by Teaching Assistants, reading of recommended portions of the text book, working problems recommended from the text and then carefully checking answers.

INSTRUCTORS AND TEACHING ASSISTANTS

Instructor

SAMUEL GELLMAN
GELLMAN@CHEM.WISC.EDU

Instructor Availability

The instructor will be available after lecture on Wednesdays and Fridays. In addition, the instructor will lead an optional discussion section most weeks.

TA Office Hours

TA Office Hours are posted on the Canvas website.

GRADING AND COURSE MATERIALS

Course Learning Outcomes (CLOs)

1. Students will learn how to master an intellectual discipline that requires both understanding of a complex conceptual framework and memorization of specific facts. This general goal will be pursued in the specific context provided by introductory organic chemistry.
[S6674]

2. In Chemistry 343, major topics include the bonding properties of carbon, the structures of organic (carbon-rich) molecules, including aspects of conformation and stereochemistry, and reactivity.
[S6675]

3. There are different paths to achieving the intended learning outcomes, because different people learn in distinct ways. Students will be challenged to determine the learning strategies and styles that are most effective for them.
[S6676]

4. Achieving these learning outcomes will empower students to master other disciplines they encounter subsequently as they pursue diverse careers, without the framework provided by a syllabus, a textbook, lectures, discussion sections and frequent assessments (exams). Chemistry 343 is taught in a manner that encourages students to take responsibility for their own learning success.
[S6677]

Grading

Course grades will be assigned on the basis of 550 points, using a curve that leads to a distribution similar to those of recent Chemistry 343 sections. In addition to 500 points from exams (as indicated above), students can earn up to 50 points from attending and participating in assigned Discussion Sections.

Discussion Sessions

TA-led sessions are mandatory. Teaching assistants will review course material and answer questions. There will be occasional quizzes. Grading will be explained by the TA (50 pts). TAs are:

Ruslan Gibadullin; gibadullin@wisc.edu; Sections 381, 382, 383, 391
Samuel Kougias; kougias@wisc.edu; Sections 384, 389, 390
Jiani Niu; jniu23@wisc.edu, Sections 385, 386, 387, 388

Laboratory Sessions

Not applicable.

OTHER COURSE INFORMATION

Other Course Information

Level: Intermediate
Counts as L&S credit
Honors optional: Students may elect to take this course for honors credit.

ACADEMIC POLICIES

ACADEMIC INTEGRITY

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to https://conduct.students.wisc.edu/academic-integrity/

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

McBurney Disability Resource Center syllabus statement: "The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA." http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php

DIVERSITY & INCLUSION

Institutional statement on diversity: "Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world." https://diversity.wisc.edu/

Course Introduction

CHEMISTRY 343, Fall 2018
1:20-2:10 PM, MWF, Room 204 Educational Sciences

Professor: Sam Gellman
Office: 7132 Chemistry Building
E-mail: gellman@chem.wisc.edu
Open Office: 2:15-3:15 PM Wednesdays and 2:15-3:00 Fridays (or by appointment)
Review session led by Prof. Gellman (optional): 5:30 PM Thursdays, location = Room 1315 Chemistry, unless otherwise announced. First session = Thurs 20 Sept (in Room Chemistry B371)

I. TEXT
"Organic Chemistry," 6th edition, Loudon
(Strongly recommended: study guide and molecular models)

II. EXAMS
A. Three exams during lecture time (locations TBA) (100 pts each)
- Friday 5 October
- Wednesday 31 October
- Wednesday 28 November
- (Note: **There will be no make-up exams.**)

B. Final exam (cumulative; 200 pts) Monday 14 December 2:45 PM, location TBA

III. GRADING
Course grades will be assigned on the basis of 550 points, using a curve that leads to a distribution similar to those of recent Chemistry 343 sections. In addition to 500 points from exams (as indicated above), students can earn up to 50 points from attending and participating in assigned Discussion Sections.

IV. PROBLEMS
Students should do all problems recommended from the text (recommendations are provided during lectures). Written answers will not be collected or graded, but problems can be discussed at the discussion sessions or during office hours. The only way a student can master the course material is by carefully working all recommended problems, and then carefully evaluating his or her written answers via comparison with the answers in the study guide/solutions manual. This process will reveal which parts of the material have been mastered, and which require further study. Learning how to learn from one's own mistakes is a critical skill that can be acquired or refined in this course. (Note: Problem numbering differs between the 5th and 6th editions of the textbook; there are other differences as well.)

V. DISCUSSION SESSIONS LED BY TEACHING ASSISTANTS
TA-led sessions are mandatory. Teaching assistants will review course material and answer questions. There will be occasional quizzes. Grading will be explained by the TA (50 pts).

CHEMISTRY 343
Professor Gellman; **1:20-2:10 M W F**; **Fall 2018**

TENTATIVE Schedule (based on textbook chapters)

5 September	Chap. 1	26 October	
7 September		29 October	Chap. 8
10 September		31 October - EXAM #2	
12 September	Chap. 2	2 November	
14 September		5 November	Chap. 9
17 September	Chap. 3	7 November	
19 September		9 November	
21 September	Chap. 4	12 November	
24 September		14 November	
26 September		16 November	Chap. 10
28 September		19 November	
1 October		21 November	Chap. 11
3 October	Chap. 5	23 November - THANKSGIVING RECESS	
5 October - EXAM #1		26 November	
8 October		28 November - EXAM #3	
10 October		30 November	Chap. 14
12 October		3 December	
15 October	Chap. 6	5 December	
17 October		7 December	Chap. 15
19 October	Chap. 7	10 December	
22 October		12 December	
24 October			