

Summer 2019

# CHEM 244-043: Organic Chemistry II

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## Chemistry 244 Organic Chemistry II

### *Mid-Session Summer 2019*

### *Course Syllabus*

**[NJIT Academic Integrity Code](#):** All Students should be aware that the Department of Chemistry & Environmental Science (CES) takes the University Code on Academic Integrity at NJIT very seriously and enforces it strictly. This means that there must not be any forms of plagiarism, i.e., copying of homework, class projects, or lab assignments, or any form of cheating in quizzes and exams. Under the University Code on Academic Integrity, students are obligated to report any such activities to the Instructor.

### COURSE INFORMATION

**Course Description:** This course is a continuation of Organic Chemistry I (CHEM 243). Students will learn about modern spectroscopic analysis technique for structure determination, recognize additional organic functional groups (ethers, aromatic compounds, ketones, aldehydes, carboxylic acids and derivatives, amines), predict the result of chemical reactions based on these functional groups, and explain the observed reactivity using mechanistic rationalizations.

**Number of Credits:** 3

**Prerequisites:** CHEM 243 with a grade of C or better.

#### Course-Section and Instructors

Course-Section	Instructor
CHEM 244-043	Dr. Andrew B. Naughton (Andy)
	Mehrun Uddin (TA)

**Office Hours for All Chemistry & Environmental Science Instructors:** [Summer 2019 Office Hours and Emails & By Appointment](#)

#### Required Textbook:

Title	Organic Chemistry
Author	Wade and Simek
Edition	9th
Publisher	Pearson, Glenview, IL
ISBN #	ISBN-13: 978-0321971371

**University-wide Withdrawal Date:** The last day to withdraw with a W is June 15. It will be strictly enforced.

Learning Outcomes:

## POLICIES

All CES students must familiarize themselves with, and adhere to, all official university-wide student policies. CES takes these policies very seriously and enforces them strictly.

**Grading Policy:** The final grade in this course will be determined as follows:

Homework	200
Participation	50
Attendance	50
Midterm Exam I	125
Midterm Exam II	125
Final Exam	150

Since this is a shortened course, an option may be presented to retake either Exam 1 or Exam 2 (student's choice, new version of the exam) before the final exam as a way of improving the lowest test grade.

Your final letter grade in this course will be based on the following tentative curve:

A	>630 pts.	C	≥490 pts.
B+	≥595 pts.	D	≥455 pts.
B	≥560 pts.	F	< 455 pts.
C+	≥525 pts.		

**Attendance Policy:** Attendance at classes will be recorded and is **mandatory**. Each class is a learning experience that cannot be replicated through simply "getting the notes."

**Homework Policy:** Homework is an expectation of the course. The homework problems set by the instructor are to be handed in for grading and will be used in the determination of the final letter grade as described above.

**Exams:** There will be two midterm exams held in class during the semester and one comprehensive final exam. The following exam periods are tentative and therefore possibly subject to change:

Midterm Exam I	June 3, 2019
Midterm Exam II	June 17, 2019
Final Exam Period	July 3, 2019

The final exam will test your knowledge of all the course material taught in the entire course.

**Makeup Exam Policy:** There will normally be **NO MAKE-UP QUIZZES OR EXAMS** during the semester. In the event that a student has a legitimate reason for missing a quiz or exam, the student should contact the Dean

of Students office and present written verifiable proof of the reason for missing the exam, e.g., a doctor's note, police report, court notice, etc. clearly stating the date AND time of the mitigating problem. The student must also notify the CES Department Office/Instructor that the exam will be missed so that appropriate steps can be taken to make up the grade.

**Cellular Phones:** All cellular phones and other electronic devices must be switched off during all class times. Such devices must be stowed in bags during exams or quizzes.

## ADDITIONAL RESOURCES

**Chemistry Tutoring Center:** The Chemistry Tutoring Center does not operate during the Mid-Summer Session. In its place, the Chemistry department has engaged a Senior Organic Chemistry Graduate Assistant to provide tutoring services. Please see the instructor for schedule of office hours.

**Off hours Testing:** As some student work summer jobs during the mid-summer session the Teaching Assistant can administer exams at other hours upon suitable notification. Please inform the instructor at least 3 days in advance if you need to rebook an exam.

**Accommodation of Disabilities:** Office of Accessibility Resources and Services (*formerly known as Disability Support Services*) offers long term and temporary accommodations for undergraduate, graduate and visiting students at NJIT.

If you are in need of accommodations due to a disability please contact Chantonette Lyles, Associate Director at the Office of Accessibility Resources and Services at 973-596-5417 or via email at [lyles@njit.edu](mailto:lyles@njit.edu). The office is located in Fenster Hall Room 260. A Letter of Accommodation Eligibility from the Office of Accessibility Resources Services office authorizing your accommodations will be required.

For further information regarding self-identification, the submission of medical documentation and additional support services provided please visit the Accessibility Resources and Services (OARS) website at:

- <http://www5.njit.edu/studentuccess/disability-support-services/>

### Important Dates

Date	Day	Event
May 21, 2019	M	First Day of Classes
May 27, 2019	M	Memorial Day
June 3, 2019	M	Exam 1
June 15, 2019	S	Last Day to drop class with a W
June 17, 2019	M	Exam 2
June 28, 2019	F	Make Up Exam 1 or 2
July 1, 2019	M	Last Day of Lectures
July 3, 2019	W	Final Exam
July 5, 2019	F	Grades Published

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## Course Outline

Lecture	Chapter	Topic	Assignment
1	12	Infrared Spectroscopy and Mass Spectrometry	See Moodle
2	13	Nuclear Magnetic Resonance Spectroscopy	See Moodle
3	14	Ethers, Epoxides and Thioethers	See Moodle

4	15	Conjugated Systems, Orbital Symmetry and Ultraviolet	See Moodle
5	16	Aromatic Compounds	See Moodle
6	17	Reactions of Aromatic Compounds	See Moodle
7	18	Aldehydes and Ketones	See Moodle
8	19	Amines	See Moodle
9	20, 21	Carboxylic Acids & Reactions	See Moodle
10	22	Alpha Substitutions & Condensation of Carbonyl Compounds	See Moodle

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Department of Chemistry & Environmental Sciences  
Course Syllabus, Fall 2018*

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