

Frontiers in Chemistry: Chem 210

Spring 2025

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: Frontiers in Chemistry

Number of Credits: 1

Prerequisites: A C or higher in Chem 125 or Chem 121

Course-Section and Instructors

Course-Section	Meeting times
Chem 210-002 Meeting times: Thursday	R 1:00-2:00 pm, FMH 403

Virtual : By appointment : <https://njit-edu.zoom.us/my/balasubr>

Webpage: The course website is available through Canvas, which can be accessed via canvas.njit.edu. Please email your instructor immediately if you cannot access the class site. All materials will be posted on the class site. Please check the site frequently for new materials and announcements. All communication for this course will be posted to Canvas on a regular basis. You are responsible for all updates posted to Canvas, and if you find any mistakes in content or you need help accessing these materials, please contact your instructor as soon as possible.

Required Textbook: None.

Periodically, students will be assigned journal articles and reading materials to prepare them for a scientific

career

University-wide Withdrawal Date: The last day to withdraw with a **W** is Monday, April 7, 2025.

General Learning Outcomes:

1. Learn how to access journal articles and distinguish between original research and reviews and opinion articles
2. Evaluate the merits and demerits of a research paper
3. Gain an understanding of research opportunities within the department
4. Gain an understanding about research pathways within the department, university and nationally
5. Apply the knowledge by writing a short research proposal on a topic of interest

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.

In addition, obtaining course materials such as past exams or solutions to homework and/or class assignments from external sources constitutes as cheating. The official Student's Solutions Guide is exempt. Posting of course materials on external websites without the approval of the instructor violates intellectual property laws and hence strictly forbidden. Any student caught cheating on homework will be assessed a penalty of 20 points, in addition to a grade of zero for the given homework assignment.

Grading Policy: The final grade in this course will be determined by a point total based on the following:

Journal paper presentation	30
Class Participation /HW	40
Mini-proposal	30

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

A	>90	C	71-74
B+	85-89	D	65-69
B	80-84	F	< 65
C+	75-79		

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."

LECTURE (FACE TO FACE OR SYNCHRONOUS ONLINE): A computer and scientific (non-graphing, non-programmable) calculator are required for all lectures. Students are expected to come to lecture after having reviewed the pre-reading for the lecture. A laptop will be required for all classes even for in-person students.

If your computer malfunctions or you are unable to attend class either in person or remotely, you are required to inform the instructor, via e-mail the **same day**. Failure to notify the instructor will result in loss of points for that day.

COURSE LEARNING RESPONSIBILITY: The shift to remote and converged teaching due to the COVID-19 pandemic has required that both instructors and students make changes to their normal working protocols for courses. Students are asked to practice extra care and attention in regard to academic honesty, with the understanding that all cases of plagiarism, cheating, multiple submission, and unauthorized collaboration are subject to penalty. Students may not collaborate on exams or assignments, directly or

through virtual consultation, unless the instructor gives specific permission to do so. Posting an exam, assignment, or answers to them on an online forum (before, during, or after the due date), in addition to consulting posted materials, constitutes a violation of the university's Honesty policy. Likewise, unauthorized use of live assistance websites, including seeking "expert" or ChatGPT help for specific questions during an assignment, can be construed as a violation of the honesty policy. All students should be familiar with the NJIT integrity code: <http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf>.

ADDITIONAL RESOURCES

Accommodation of Disabilities: Office of Accessibility Resources and Services, OARS (*formerly known as Disability Support Services*) offers long term and temporary accommodations for undergraduate, graduate and visiting students at NJIT. See <https://www.njit.edu/studentsuccess/node/5> to learn more about their services. If you are in need of accommodations due to a documented disability, please contact the Office of Accessibility Resources and Services 973-596-5417 or via email oars@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 is required to receive accommodations on assignments or exams. Eligible students requiring special conditions for exams must fill out an [OARS forms](#) stating the date and time of the exam. It is advisable for eligible students to fill out forms for the two common exams the first week of classes

Mental Health and Well-being: NJIT is committed to the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of mental health support, services are available. For help, such individuals should contact Center for Counseling and Psychological Services (c-CAPS) at <https://www.njit.edu/counseling/> or by calling the c CAPS office at 973-596-3414. If you need support and information about options and resources, please also reach out to the Office of the Dean of Students at <https://www.njit.edu/dos/>

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

IMPORTANT DATES: (See [Spring 2024 Academic Calendar](#))

January	15	Monday	Martin Luther King, Jr. Day
January	16	Tuesday	First Day of Classes
January	20	Saturday	Saturday Classes Begin
January	22	Monday	Last Day to Add/Drop a Class
January	22	Monday	Last Day for 100% Refund, Full or Partial Withdrawal
January	23	Tuesday	W Grades Posted for Course Withdrawals
January	29	Monday	Last Day for 90% Refund, Full or Partial Withdrawal, No Refund for Partial Withdrawal after this date
February	12	Monday	Last Day for 50% Refund, Full Withdrawal
March	4	Monday	Last Day for 25% Refund, Full Withdrawal
March	10	Sunday	Spring Recess Begins - No Classes Scheduled - University Open
March	16	Saturday	Spring Recess Ends
March	29	Friday	Good Friday - No Classes Scheduled - University Closed
March	31	Sunday	Easter Sunday - No Classes Scheduled - University Closed
April	1	Monday	Last Day to Withdraw
April	30	Tuesday	Friday Classes Meet
April	30	Tuesday	Last Day of Classes
May	1	Wednesday	Reading Day 1
May	2	Thursday	Reading Day 2
May	3	Friday	Final Exams Begin
May	9	Thursday	Final Exams End

May	11	Saturday	Final Grades Due
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Course Outline

Date of class	Outline	Assignment
23-Jan	Overview: Course expectations	Syllabus, Introduction, expectations HW 1- pre-reading assigned
30-Jan	Reading an article- practice 1	Class activity- reading a scientific paper
6-Feb	Introduction to library research	HW 2-Pick a paper for class presentation, summary
13-Feb	Research grant Opportunities presentation	HW 3- Reflection and Key takeaways from presentation
20-Feb	<i>Faculty/ external presentation -1</i>	HW 4- Presentation summary
27-Feb	External presenter -Dr. Draganescu	HW 6- Presentation reflection and summary
6-Mar	Student Paper presentation: 1	HW 7- Synopsis of papers presented
13-Mar	Student paper presentation - 2	HW 8- Synopsis on papers presented
20-Mar	Spring break	
27-Mar	Faculty presentation – Dr.Guillermo Jimenez-Aleman	HW 9- Presentation summary
3-Apr	Student paper presentation – 3 if needed or Faculty presentation	HW 10- Synopsis/ presentation summary
10-Apr	Faculty presentation -Dr. Parmalee	HW 10- Presentation summary
17-Apr	Mini-proposal guidelines and brainstorm	In class activity
24-Apr	Mini proposal summary presentation	
1-May	Mini proposal summary presentation	Mini-proposal report due

Updated by Balasubramanian- 2025
Department of Chemistry & Environmental Sciences
Course Syllabus, Spring 2025