

WORLD OF CHEMISTRY 101 Spring 2021
Instructor: Dr. Karen Chaffee

Meets Monday, Wednesday

4:00-5:20PM

e-mail: kchaffee@newark.rutgers.edu

Tentative Office hours: These will meet during class time in Collaborate or by appointment.

This course is designed for those students not majoring in a science. This course will help students understand the basic quantitative, qualitative and theoretical aspects of chemistry, plus applications to everyday life. It is designed for those students not majoring in a science. Please check with your adviser if you are a science major; it may not count toward your degree.

Webpage: We will use Blackboard:

FOR HELP Chat with me in Collaborate during office hours or make an appointment to see me at times other than office hours

Text: Chem 2, 2nd Edition by Hogg

9781305649644

For this course, I will load lectures on Blackboard; the links will be in Course Documents. You can listen to the lectures anytime. I will run the course through Course Documents on Blackboard.

I will load activities/quizzes every class period in Blackboard 'Assignments'. These will quiz you on the material you learned in lecture. They will be required (will be worth class credit.) You will have many days to complete them. When doing class assignments, you may work with friends, a tutor or with me to help you learn.

Exams will also be on Blackboard in Assignments and you must do your own work for exams. Exams will be open book.

I will be typically be available in Collaborate during class time for at least an hour (unless I warn students ahead of time that I can't be available) to answer questions and work out problems. This will not be required.

So, class will include

1. Recorded lectures
2. Class assignments
3. Exams/Finals
4. Help in Collaborate

The lectures follow the book. Some students find that reading the book helps them understand what they didn't understand in lecture. There are suggested book homework problems but these are not required—some students find them helpful.

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Tentative schedule

I will load lectures on the dates given (or even before!) However, you can watch them anytime. I will also post the power points for word docs for the lectures. There will be an assignment (in Blackboard Assignments) for each lecture.

Date	Chap	Topic
1/20-1/25	2.1-5, 3.2b-8	atoms, protons, neutrons electrons
1/27-2/1	2.1-5, 3.2b-8	electron configuration, periodic table
2/3-2/8	5	ionic and covalent compounds
2/10-2/15	5, 8	naming, the states of matter, chemical equations, moles, energy, reactions, review
2/17		EXAM 1
2/22	8	chemical equations, moles, energy, reactions,
2/24	8	Thermodynamics and start chapter 9
3/1	9, 13	acid base and start chapter 13
3/3-3/10	13	Chap 13 Introduction to nuclear reactions, radioactivity, half life , nuclear fission,
Spring Break	3/15-3/17	
3/22-3-24	13, 12	nuclear power plants, nuclear weapons, start chapter 12
3/29		EXAM 2
3/31	13, 12	Finish nuclear power plants, nuclear weapons and organic chemistry,
4/5	12.1,6, 7	organic chemistry,
4/7-4/12	12.1,6, 7	petroleum, energy from petroleum
4/14-4/19	14.1-3	organic chemistry, alcohols, carboxylic acids, esters
4/21	15,16	chemistry of life
4/26		EXAM 3
4/28-5/3	15, 16, 17 Selected topics	chemistry of life, nutrition, review (and selected topics including cloning, genetic engineering, and drugs, and other topics if we have time!)

The grade is based on exams and blackboard activities/quizzes. You will need to go to COURSE DOCUMENTS to learn about class activities/quizzes. Every lecture I will post documents and instructions for what you need to do. I will also send emails to you.

Grading:

E1: 195 points

E2: 195 points

E3: 180 points

Final: 280 points

Activities/quizzes on Blackboard 150

Total: 1000 points

Exams and activities are open book / open notes

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END of CHAPTER Homework is not required/collected. These are just extra problems that might help you.

Blackboard activities/quizzes are required

This list may be changed according to the needs of the class.

Chapter 3 : 9, 10, 14, 15, 17, 19, 21, 23, 25, 27, 30, 31, 33, 35, 45, 51, 53, 55, 56, 57

chapter 5 1, 9, 11, 13a,b,e, 19a,b,e,f, 25a, c, e, f, h,

Chapter 8: 1, 4, 15, 19, 21, 23, 24, 33, 48, 49, 52,

chapter 9: 1, 2, 6, 7, 11, 13, 16a, 18, 19, 20, 21, 22,

Chapter 13: 3, 5, 7, 13, 30, 33, 34, 36, 41, 42--45 47, 50

Chapter 12: 1,2,4,6a,b, 13 a,b,c,d (in 13, just answer, are they the same or different?)

Chapter 14: 3b, d, e, f 9, 12, 19, 20, 26, 36 b and c, 40a,b,c,f 42,

Chapter 15: 9 a and c, 12, 13, 15, 23, 24, 25, 26, 27 a,b,d, 28, 31, 32

As an academic community dedicated to the creation, dissemination, and application of knowledge, Rutgers University is committed to fostering an intellectual and ethical environment based on the principles of academic integrity. Academic integrity is essential to the success of the University's educational and research missions, and violations of academic integrity constitute serious offenses against the entire academic community. The entire Academic Integrity Policy can be found here <http://academicintegrity.rutgers.edu/>

Accommodation and Support Statement

Rutgers University Newark (RU-N) is committed to the creation of an inclusive and safe learning environment for all students and the University as a whole. RU-N has identified the following resources to further the mission of access and support:

For Individuals with Disabilities: The Office of Disability Services (ODS) is responsible for the determination of appropriate accommodations for students who encounter barriers due to disability. Once a student has completed the ODS process (registration, initial appointment, and submitted documentation) and reasonable accommodations are determined to be necessary and appropriate, a Letter of Accommodation (LOA) will be provided. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at ods.rutgers.edu. Contact ODS at (973)353-5375 or via email at ods@newark.rutgers.edu.

For Individuals who are Pregnant: The Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy. Students may contact the Office of Title IX and ADA Compliance at (973) 353-1906 or via email at TitleIX@newark.rutgers.edu.

For Absence Verification: The Office of the Dean of Students can provide assistance for absences related to religious observance, emergency or unavoidable conflict (e.g., illness, personal or family emergency, etc.). Students should refer to [University Policy 10.2.7](#) for

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information about expectations and responsibilities. The Office of the Dean of Students can be contacted by calling (973) 353-5063 or emailing deanofstudents@newark.rutgers.edu.

For Individuals with temporary conditions/injuries: The Office of the Dean of Students can assist students who are experiencing a temporary condition or injury (e.g., broken or sprained limbs, concussions, or recovery from surgery). Students experiencing a temporary condition or injury should submit a request using the following link: <https://temporaryconditions.rutgers.edu>.

For English as a Second Language (ESL): The Program in American Language Studies (PALS) can support students experiencing difficulty in courses due to English as a Second Language (ESL) and can be reached by emailing PALS@newark.rutgers.edu to discuss potential supports.

For Gender or Sex-Based Discrimination or Harassment: The Office of Title IX and ADA Compliance can assist students who are experiencing any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking. Students can report an incident to the Office of Title IX and ADA Compliance by calling (973) 353-1906 or emailing TitleIX@newark.rutgers.edu. Incidents may also be reported by using the following link: tinyurl.com/RUNReportingForm. For more information, students should refer to the University's Student Policy Prohibiting Sexual Harassment, Sexual Violence, Relationship Violence, Stalking and Related Misconduct located at <http://compliance.rutgers.edu/title-ix/about-title-ix/title-ix-policies/>.

For support related to interpersonal violence: The Office for Violence Prevention and Victim Assistance can provide any student with confidential support. The office is a **confidential resource** and does *not* have an obligation to report information to the University's Title IX Coordinator. Students can contact the office by calling (973) 353-1918 or emailing run.vpva@rutgers.edu. There is also a confidential text-based line available to students; students can text (973) 339-0734 for support.

For Crisis and Concerns: The Campus Awareness Response and Education (CARE) Team works with students in crisis to develop a support plan to address personal situations that might impact their academic performance. Students, faculty and staff may contact the CARE Team by using the following link: tinyurl.com/RUNCARE or emailing careteam@rutgers.edu.

For Stress, Worry, or Concerns about Well-being: The Counseling Center has confidential therapists available to support students. Students should reach out to the Counseling Center to schedule an appointment: counseling@newark.rutgers.edu or (973) 353-5805. If you are not quite ready to make an appointment with a therapist but are interested in

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self-help, check out *TAO at Rutgers-Newark* for an easy, web-based approach to self-care and support: <https://tinyurl.com/RUN-TAO>.

For emergencies, call 911 or contact Rutgers University Police Department (RUPD) by calling (973) 353-5111.

Learning Resources:

- Rutgers Learning Center (tutoring services)
Room 140, Bradley Hall
(973) 353-5608
<https://sasn.rutgers.edu/student-support/tutoring-academic-support/learning-center>
- Writing Center (tutoring and writing workshops)
Room 126, Conklin Hall
(973) 353-5847
nwc@rutgers.edu
<https://sasn.rutgers.edu/student-support/tutoring-academic-support/writing-center>