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 Canvas.

**FOR HELP** See me during office hours, or make an appointment to see me at times other than office hours.

**Suggested Text:** Chem 2, 2nd Edition by Hogg. OWL is Not required.

**Tentative schedule, we may get a little ahead or behind**

<table>
<thead>
<tr>
<th>Date</th>
<th>Chap</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>9/6-13</td>
<td>2.1-5, 3.2b-8</td>
<td>atoms, protons, neutrons electrons</td>
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<tr>
<td>9/18-20</td>
<td>2.1-5, 3.2b-8</td>
<td>electron configuration, periodic table</td>
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<tr>
<td>9/25-9/27</td>
<td>5</td>
<td>ionic and covalent compounds</td>
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<tr>
<td>10/2</td>
<td>5, 8</td>
<td>naming, the states of matter, chemical equations, moles, review</td>
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<tr>
<td>10/4</td>
<td></td>
<td><strong>EXAM 1</strong></td>
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<tr>
<td>10/9-10/11</td>
<td>8</td>
<td>chemical equations, moles, energy, reactions,</td>
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<tr>
<td>10/16</td>
<td>8</td>
<td>thermodynamics</td>
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<tr>
<td>10/18-20</td>
<td>9</td>
<td>acid base</td>
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<tr>
<td>10/25-11/1</td>
<td></td>
<td>Introduction to nuclear reactions, radioactivity, half life, nuclear fission,</td>
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<tr>
<td>11/6</td>
<td></td>
<td><strong>EXAM 2</strong></td>
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<tr>
<td>11/8</td>
<td>13, 12</td>
<td>nuclear power plants, nuclear weapons, begin chapter 12</td>
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<tr>
<td>11/13-20</td>
<td>12.1-4, 6, 7</td>
<td>organic chemistry, petroleum, energy from petroleum, start chapter 14</td>
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<tr>
<td>11/23-11/26</td>
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<td>Thanksgiving break</td>
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<tr>
<td>11/27-12/4</td>
<td>Selected from 14.1-4</td>
<td>organic chemistry, alcohols, carboxylic acids, esters, polymers, begin chapter 15 DNA</td>
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<tr>
<td>12/6</td>
<td></td>
<td><strong>EXAM 3</strong></td>
</tr>
<tr>
<td>12/11-12/13</td>
<td>Chapter 15, 16, 17 Selected topics</td>
<td>chemistry of life, nutrition, drugs review (and selected topics including cloning, genetic engineering, and drugs, and other topics if we have time!)</td>
</tr>
</tbody>
</table>

**Final** Dec 18 Monday 3:00-6:00 pm

Wednesday November 22, 2023 is **FRIDAY**
Attendance is part of grade. You will receive full credit (100 points) for attending 80% of lectures. (you have 5 free misses) After that, your grade will decrease 5 points for every missed lecture. However, if you need to miss more than 5, please talk to me, we can work something out!

The grade is based on exams and attendance. Grading:
E1: 200 points
E2: 200 points
E3: 180 points
Final: 320
Attendance: 100
Total: 1000 points

Please look at points on Canvas rather than percent.

To avoid any need for make-up exams, the score on the final exam (as a percentage) can be used to replace the lowest score of any of the three 80-minute exams (or an exam missed for any reason).

No bathroom breaks during exams unless you speak to me before you get your exam paper. No cell phones or electronic devices during exams. You cannot leave the exam room for the first 30 minutes after we start; you cannot start the exam after people have started to leave.

OWL Quizzes (that come with new textbooks) are not required. I won’t set OWL up because I will have online quizzes you may do, but they are not required.

**END of CHAPTER Homework.** This is not collected. Here are suggested problems:

- 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

**Academic Integrity**

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:

[https://academicintegrity.rutgers.edu/sites/default/files/pdfs/current.pdf](https://academicintegrity.rutgers.edu/sites/default/files/pdfs/current.pdf)

Your health and well-being matter, and Rutgers has put in place a number of resources that are intended to help students through the challenges that might emerge during
these times. Information on many of these resources appears below. Please let us know immediately if you are experiencing circumstances that are negatively impacting your academic performance. We also strongly encourage you to contact your academic advisor.

**Accommodation and Support**

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

- **Absences:** All students are responsible for timely notification of their instructor regarding any expected absences. The Division of Student Affairs can provide assistance for absences related to religious observance, emergency or unavoidable conflict (illness, personal or family emergency, etc.) Students should refer to the University’s Course Attendance policy (10.2.7) at [https://policies.rutgers.edu/sites/default/files/10.2.7%20-%20current.pdf](https://policies.rutgers.edu/sites/default/files/10.2.7%20-%20current.pdf), for complete expectations and responsibilities. The office can be contacted at: (973) 353-5063 or deanofstudents@newark.rutgers.edu.

- **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 follow up with a discussion. This should be completed as early in the semester as possible as accommodations are not retroactive. More information can be found at ods.rutgers.edu. Contact ODS: (973) 353-5375 or ods@newark.rutgers.edu.

- **Temporary Conditions/Injuries:** The Division of Student Affairs can assist students who are experiencing a temporary condition of injury (broken or sprained limbs, concussions, or recovery from surgery). Students experiencing a temporary condition or injury should submit a request for assistance at: [https://temporaryconditions.rutgers.edu](https://temporaryconditions.rutgers.edu).

- **Pregnancy:** The Office of Title IX and ADA Compliance is available to assist students with any concerns or potential accommodations related to pregnancy. Students may contact the office at (973) 353-1906 or TitleIX@newark.rutgers.edu.

- **Gender or Sex-Based Discrimination or Harassment:** The Office of Title IX and ADA Compliance can assist students experiencing any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking. Students can reports an incident to the office at: (973) 353-1906 or 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: [https://uec.rutgers.edu/policies/title-ix/](https://uec.rutgers.edu/policies/title-ix/).
• **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 a reporting obligation to report information to the University’s Title IX Coordinator. Students can contact the office at: (973) 353-1918 or run.vpva@rutgers.edu. There is also a confidential, text-based line students can text for support: (973) 339-0734.

• **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 academic performance. Students may contact the CARE Team at: [http://tinyurl.com/RUNCARE](http://tinyurl.com/RUNCARE) or careteam@rutgers.edu.

• **Stress, Worry, or Concerns about Well-Being:** The Counseling Center [https://studentaffairs.newark.rutgers.edu/health-wellness/counseling-center](https://studentaffairs.newark.rutgers.edu/health-wellness/counseling-center) has confidential therapists available to support students. To schedule an appointment: counseling@newark.rutgers.edu or (973) 353-5805. If a student is not quite ready to make an appointment with a therapist but is interested in self-help, check out [https://studentaffairs.newark.rutgers.edu/health-wellness/counseling-center/sanvello-app](https://studentaffairs.newark.rutgers.edu/health-wellness/counseling-center/sanvello-app).

• **Emergencies:** Call 911 or contact Rutgers University Police Department (RUPD) at (973) 353-5111.

**Learning Resources:**

• **Rutgers Learning Center (tutoring services)**  
  (973) 353-5608  
  [https://sasn.rutgers.edu/student-support/tutoring-academic-support/learning-center](https://sasn.rutgers.edu/student-support/tutoring-academic-support/learning-center)

• **Writing Center (tutoring and writing workshops)**  
  (973) 353-5847  
  nwc@rutgers.edu  
  [https://sasn.rutgers.edu/student-support/tutoring-academic-support/writing-center](https://sasn.rutgers.edu/student-support/tutoring-academic-support/writing-center)