

Course Syllabus

CHMO 231: Organic Chemistry I

Class Time and Location:	M/W/F 10:00am-10:50am (GOS-1250) OR M/W/F 11:00am-11:50pm (GOS-1250)
Course Mode:	In-person (some flipped)
Prerequisite(s)/Co-requisite courses:	General Chemistry

Instructor Information

Instructor:	Dr. Tina Goudreau (Dr. G / Professor G)
Contact Information:	cgcsch@rit.edu
Office Hours (chem help):	See Guided Organic Help (GOH) session info below.
Office Hours (personal):	Make an appointment (cgcsch@rit.edu) and visit GOS-3276
Instructor-Student Communication	Email (cgcsch@rit.edu)
Online Course Material/Course Webpage:	MyCourses and WileyPlus online homework

Course Description

Catalog Description

This course is a study of organic molecular structure, stereochemistry, conformation, nomenclature, and reactivity of the following functional groups: alkyl halides, alkanes, alkenes. This course also covers IR and NMR spectroscopy, and emphasizes acid/base equilibria throughout the course. In addition, the course provides an introduction to the use of mechanisms in describing and predicting organic reactions.

Course Materials

Required Texts and Resources	David Klein, Organic Chemistry 4 th ed. (1st , 2nd , or 3rd editions are ok), Wiley.
Technology requirements:	Access to Mycourses, Wiley Plus Chemistry (online homework).

Course Overview

This course is probably a requirement for your major or you are taking it as part of the pre-requisite to apply to a medical/dental/veterinary program. This course is truly a foundational course that trains students to become more comfortable with molecular structure as it relates to organic molecules. It is also critical in laying the foundation for you to gain insight on how functional groups behave, explaining many topics you will cover in other coursework. We will work to:

- Introduce you to the nomenclature and fundamental reactions of organic compounds.
- Learn the structural elements of carbon-based compounds and how the structure is inferred from spectroscopic evidence.
- Provide you with the skills to recognize basic reaction types and predict reaction products.
- Prepare you for further study in organic chemistry.

Course Learning Outcomes

- Identify and describe various organic functionality and their properties
- Assign appropriate nomenclature to various organic compounds based on carbon chain length and functionality
- Identify molecules with resonance
- Qualitatively assess the stability of an anion and thus predict acid-base equilibria
- Identify a chiral or achiral molecule and assign a chiral center as either R or S
- Explain the fundamentals of covalent bonding and describe it using orbital diagram depictions
- Identify and describe the kinetics and stereochemistry of first- and second- order reactions
- Predict the products of various organic reactions including acid-base reactions, substitutions, eliminations, alkene additions, and radical halogenation of an alkane.
- Determine the functional groups present in a compound using infrared spectroscopy
- Predict the structure of a simple organic compound using NMR

Guided Orgo help Sessions (GOh)

Need to find other students in the class with whom to study?

Have a specific question about the homework?

Need a certain concept explained differently?

Need some practice but with someone there to keep you on the right track?

Then you should GOh to these sessions (see what I did there?) Goh sessions are led by your peers who completed the course in previous years or by me. These help sessions will have someone there to help you each week. We want the room loud with the sound of "Oh" from the mouths of those attending who suddenly grasp an organic chem concept. Want to attend the Goh session but just do your homework during that time so you have help nearby? Want to ask a question about a post-lab? If it's about organic chemistry, our leaders will work hard to help you succeed. Stay tuned for when the Goh sessions will be held. They are not mandatory but serve as powerful resources for you throughout the course.

Course Schedule

Week Date	Lectures
Monday Aug 28: Wednesday Friday: No Class	Course management - Welcome to Orgo I Flipped Classes -watch videos Chapt 1 slides Chapt 1: In-Class – slides 60 onward No Class: Flipped Classes -finish chapt 1 and start Chapt 2 slides 1-12
(No Class Monday-Labor Day) Wed Sept 6 /Fri Sept 8:	No Class: Flipped Classes -watch videos Chapt 2 slides 1-12 Chapt 2: Molecular Representations
Week Sept 11:	Chapt 3: Acids and bases
Week Sept 18:	Chapt 3: Acids and bases Flipped Classes -watch videos Chapt 4 slides 1-18 Chapt 4: Alkanes and Cycloalkanes In-Class – slides 19 onward
Week Sept 25:	Chapt 4: Alkanes and Cycloalkanes
Exam 1 in-class Friday Sept 29th (Chapts 1-4)	
Week Oct 2:	Chapt 5: Stereoisomerism Flipped Classes -watch videos Chapt 5 slides 1-20
(No Class Monday) Wednesday Oct 11 Fri Oct 13	Chapt 5: Stereoisomerism
Week Oct 16:	Chapts 15 & 16: MS spectrometry, and IR and NMR spectroscopy
Week Oct 23:	Chapts 15 & 16: MS spectrometry, and IR and NMR spectroscopy
Exam 2 in-class Friday Oct 27th (Chapts 5, 15 & 16)	
Week Oct 30:	Chapts 6 Chemical Reactivity Chapt 7: Substitution Reactions
Friday Nov 6:	Chapts 7: Substitution and Elimination
Week Nov 13:	Chapt 7: Elimination Reactions
Exam 3 in-class Friday Nov 17th (Chapts 6-7)	
Monday Nov 20: Thanksgiving Break	Chapt 8: Alkene Reactions
Week Nov 27:	Chapt 8: Alkene Reactions
Week Dec 4:	Chapt 9: Alkyne Reactions
Monday Dec 11:	Chapt 9: Alkyne Reactions
Exam 4 in-person (Chapts 8-9) in-class Final Exam Week + Optional Bonus Final – see SIS for time and location	

Grading/Evaluation

Graded Item	% of Grade
Online Homework	25%
GOh Session Participation = Bonus	0%
Four Exams	75%
Optional Final Exam = Bonus	0%
Total	100%

Grade Scale

RIT's Grading Policy can be found here:

<https://www.rit.edu/academicaffairs/policiesmanual/d050>

Based on the 100% total listed above, letter grades will be assigned as follows:

A : > 90%	B+ : 86-89%	B : 80-85%	C+ : 76-79%
C : 70-75%	C- : 66-69%	D : 60-65%	F : < 60%

Bonus/Extra Credit

See optional final exam.

See GOh session information.

Course Expectations

Instructor's expectations of students

- You will need to **use myCourses** to stay informed about the course.
- **Engaged attendance** in class is expected for success.
- **Homework** assigned through WileyPlus online will be expected to be completed by the due dates given.
- Exams 1,2 and 3 will be timed and administered in class.

Email / Communication policy (expectations of students)

Today's society has become very lax with communication. In an attempt to prepare you for the real world, I will not respond to emails that are written in a form that I cannot decipher or that come from unknown email addresses. Email messages that more closely resemble text messages to your BFF than an email to your professor will not be answered. Make your grandma proud and write a proper letter!

- Emails to me should always include the following and serves as a great guideline for all your courses or job prospects:
 - To line – to whom are you writing? Address them professionally! Dr., Prof., etc. If you do not know, Mr. or Ms. is acceptable, but in college courses, Professor is more appropriate. (You can call me Dr. G 😊)
 - Class reference – of which class are you inquiring? Many of your professors teach more than one class! For a job? What is the job title? (This is super helpful to me!)
 - Your question(s), statement(s), etc. – written in comprehensible English, please!
 - Your name – your professors, and others, would like to reply to you in a similar professional manner. Do NOT assume that the RIT email system will tell us who you are – it will not always. YOU tell us who YOU are! (I kid you not, I have had to start emails with 'Dear Ninjadog592' before)
 - Recommend students add an email signature to their RIT email client which is automatically added to all outgoing emails. At a minimum an email signature should contain the students full name, College, Department, and Major, along with any other contact information that the student feels comfortable sharing (e.g. cell phone number). (I like knowing your major 😊)
 - Recommend students check that their email profile contains their full name.

Student time commitment

Since this is a 3-credit hour course, you should plan to spend 3 hours per week in class and an additional 6 to 9 hours on readings, practice problems, and homework assignments. The rule-of-thumb is 2 to 3 hours per week outside the "classroom" for every credit hour per week in the classroom. If you do the math, it adds to 9–12 hours per week, total.

What Students can expect of me

- Grades will be posted on myCourses within 2 weeks of artifact submission, unless otherwise noted in the assignment. This is in accordance with the RIT Policy D05.0 Grades which states in part, *"Faculty members must provide feedback for all submitted work within two weeks of the submission deadline. Posting grades to RIT's Electronic Course Management System is required. The two-week posting requirement is waived in the case of deadline extensions, late submission of work, any extraneous circumstances, or when explicitly stated in the evaluation criteria."*
(<https://www.rit.edu/academicaffairs/policiesmanual/d050>).
- Office hours will be blended. Some of my office hours will be face-to-face when I'm on campus and some will be inline via zoom when I'm at home. Posting of office hours and the location can be found on myCourses and will be updated as needed. If those times do not work for you, you may always request an appointment via email.

- Email / Communication policy:

For this class, I will respond to your email within **24 hours** Monday through Friday. If you do not hear from me in that time frame, please resend your email, as things do get lost. Over the weekend, do not expect an immediate response. Now, it is quite likely that you will receive your response in less than 24 hours, but I do not guarantee it.

General Course Policies

Academic Integrity Statement

As an institution of higher learning, RIT expects students to behave honestly and ethically at all times, especially when submitting work for evaluation in conjunction with any course or degree requirement. RIT Online encourages all students to become familiar with the [RIT Honor Code](#) and with [RIT's Academic Integrity Policy](#).

Do not cheat. Avoid the appearance of cheating in this class. Do not allow others to cheat from you.

D.08.0 Student Academic Integrity Policy

IV. ACADEMIC INTEGRITY A breach of student academic integrity falls into three basic areas: cheating, duplicate submission and plagiarism

A. Cheating: Cheating is any form of fraudulent or deceptive academic act, including falsification of data, possessing, providing, or using unapproved materials, sources, or tools for a project, exam, or body of work submitted for faculty evaluation.

B. Duplicate Submission: Duplicate submission is the submitting of the same or similar work for credit in more than one course without prior approval of the instructors for those same courses.

C. Plagiarism: Plagiarism is the representation of others' ideas as one's own without giving proper attribution to the original author or authors. Plagiarism occurs when a student copies direct phrases from a text (e.g. books, journals, and internet) and does not provide quotation marks or paraphrases or summarizes those ideas without giving credit to the author or authors. In all cases, if such information is not properly and accurately documented with appropriate credit given, then the student has committed plagiarism.

If you are caught cheating on any assignment or exam, appropriate academic disciplinary action will be taken to the fullest extent allowed by the University. Refer to your "Students Rights and Responsibilities" handbook for further guidance on the Academic Dishonesty policy at RIT.

<https://www.rit.edu/academicaffairs/policiesmanual/d080>.

Statement on Reasonable Accommodations

RIT is committed to providing academic adjustments to students with disabilities. If you would like to request academic adjustments such as testing modifications due to a disability, please contact the Disability Services Office (DSO). Contact information for the DSO and information about how to request adjustments can be found at <https://www.rit.edu/disabilityservices/>. After you receive academic adjustment approval, it is imperative that you see me during office hours so that we can work out whatever arrangement is necessary.

Course Copyright Policy

All course materials students receive or to which students have online access are protected by copyright laws. Students may use course materials and make copies for their own use as needed, but unauthorized distribution and/or uploading of materials without the instructor's express permission is strictly prohibited. RIT Policy C03.2 Copyright Policy addresses this issue (<https://www.rit.edu/academicaffairs/policiesmanual/c032>). For example, uploading completed labs, homework, or other assignments to any study site constitutes a violation of this policy. Students who engage in the unauthorized distribution of copyrighted materials may be held in violation of the University's Code of Conduct, and/or liable under Federal and State laws.

Starfish

This course participates in the RIT Starfish academic alert system, which is designed to promote student success through communication between students, instructors, and advisors. I will send a whole-class status update to all students before the semester midpoint. When I am concerned about an individual student's academic performance, I may raise an academic alert to notify the student as well as their advisor(s). On the other hand, when a student is doing well, I may send a "kudos" message. If you receive an academic alert email, it is your responsibility to contact me as soon as possible to discuss the issue, its potential impact on your success in the course, and identify people and resources to help you move forward. For more information about the Starfish system, visit <http://www.rit.edu/starfish>.

Statement on Title IX

Title IX violations are taken very seriously at RIT. RIT is committed to investigate complaints of sexual discrimination, sexual harassment, sexual assault and other sexual misconduct to ensure that appropriate action is taken to stop the behavior, prevent its recurrence, and remedy its effects. Please view the [Title IX Rights and Resources at RIT](#); you can find additional syllabus language that you can modify as need on its Syllabus Language subpage.

Policies Specific to this Course

Course Modality (in-person)

This course will be delivered in-person and will largely utilize Mycourses and the Pearson Mastering online homework system. All lectures have pre-recorded videos that will also be posted as well and shared under the content section of Mycourses. These are handy to either, get ahead, hear something again, catch up if a class was missed, or for me to spend time in class on harder stuff and allow you to watch something review-like or repetitive from home. Additionally, course note templates are also available so as to make following along easier. I will hold office hours for students who have further questions or need to speak with me. My office hours should not be

used for personal issues since they are not private. If you have a personal matter to discuss, please feel free to contact me via email and schedule an appointment.

Internet Connection (Required)

For this course, a reliable and consistent internet connection is required.

All students, faculty, and staff are responsible for familiarizing themselves with the RIT [Computer Policy](#).

For this course, at least most learning materials will be provided in myCourses and/or other online platforms. By this, your access to a strong internet connection regularly is imperative to your success. Access to a reliable Internet connection is required for this course. A problem with your Internet access may not be used as an excuse for late, missing, or incomplete coursework. If you experience problems with your Internet connection while working on this course, it is your responsibility to find an alternative Internet access point, such as a public library or Wi-Fi ® hotspot.

Netiquette

Netiquette—or network etiquette—is the socially and professionally acceptable way to communicate on the Internet. Please abide by these guidelines of "netiquette" when using online communication tools with your classmates and me:

- Identify yourself. Begin messages with a greeting and close with your name.
- Avoid sarcasm. It can be misinterpreted and cause hurt feelings.
- Keep the dialog collegial and professional. Some discussion topics may be controversial.
- Do not flame - These are outbursts of extreme emotion or opinion.
- Think twice before you submit a response. You cannot edit or delete your posts once they have been submitted.
- Do not use offensive language or profanity.
- Use clear subject lines for your posts.
- Do not use all caps. It is the online equivalent of YELLING!
- Avoid using abbreviations or acronyms - like FDA, CDC, etc. - unless you are confident the entire class knows them.
- Use emoticons (https://en.wikipedia.org/wiki/List_of_emoticons) to clarify your emotions. They add context to your words that cannot be seen otherwise. :)
- Be forgiving. Anyone can make a mistake.

I reserve the right to remove any post that does not abide by these guidelines. Please refer to the RIT Student Code of Conduct for a full list of student conduct expectations. (<https://www.rit.edu/academicaffairs/policiesmanual/d180>)

Online Safety

RIT is committed to educational access for all. Our students come from all walks of life and have diverse life experiences. As with any other online community, the lack of physical interaction in an online classroom can create a false sense of anonymity and security. While one can make new friends online, digital relationships can also be misleading. Good judgment and decision making are critical when choosing to disclose personal information with others whom you do not know, which will likely include individuals within our class for you.

Other Elements

Diversity, Inclusion, and Respect

RIT has put forth [Policy P05.0 Diversity Statement](#) for all community member. RIT through its policies and practices is responsible for building an inclusive environment where membership in the community allows for faculty, staff and students to reach their fullest potential, both professionally and personally. RIT is committed to the development, administration and interpretation of policies and procedures in a way that is consistent with our commitment to diversity and is in compliance with federal, state and local laws. RIT's policies and procedures are administered in a way that supports fair treatment for all faculty, staff, students, and the RIT community at large.

Counseling and Psychological Services

Many students at RIT face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation.

Located on the second floor of the August Center building (above the Student Health Center), [Counseling and Psychological Services](#) provides confidential and personalized services to meet the mental health needs of currently enrolled, undergraduate and graduate students on the Henrietta campus.

Our mission is to enhance the RIT student potential for learning and success and to promote the emotional health and well-being of the campus community through:

1. Providing responsive, empirically-based, and culturally competent mental health services that include:
 - Short-term individual psychotherapy
 - Group counseling and psychotherapy
 - Urgent Care crisis intervention
 - Assessment and evaluation
 - Psychiatric services
2. Providing graduate clinical training in counseling, psychotherapy and college mental health
3. Providing campus-wide consultation and education

Campus Location: 2100 August Center, second floor (Currently, all appointments are conducted via phone or Zoom)

Phone:

During Business Hours: 585-475-2261

After Business Hours, Weekends/Holidays: 855-436-1245

Fax: 585-475-6548

Email: caps@rit.edu

NOTE: DO NOT USE E-MAIL IN AN EMERGENCY SITUATION, since you cannot be assured that a counselor will open it at your time of need.

Emergency Contacts:

For urgent matters during business hours, contact Counseling and Psychological Services at 585-475-2261.

For urgent matters that cannot wait for business hours, call 1-855-436-1245 to speak with a mental health provider or call Public Safety at 585-475-3333.

National Suicide Hotline: **1 800 273-8255**

Crisis Text Line: Text **HOME** to **741741**

RIT COVID-19 Safety Plan

RIT is committed to the safety of the RIT community and beyond. Because the situation is still in a rapid state of change, checking the RIT Ready website, and specifically the RIT Safety Plan for the most up to date information is recommended: <https://www.rit.edu/ready/rit-safety-plan>

Changes to the syllabus

I have provided this syllabus as guide to our course and have made every attempt to provide an accurate overview of the course. However, as instructor, I reserve the right to modify this document during the semester, if necessary, to ensure that we achieve course learning objectives. You will receive advance notice of any changes to the syllabus through myCourses/email.

Continuity of Learning (Course-level)

In the event that there is a disruption in our learning, I will communicate all changes to you as quickly as possible. If a personal interruption removes me from the online classroom space, you will be informed of this directly via email and on myCourses. In this communication, any changes in the learning structure will be carefully outlined, as will all necessary steps moving forward, for you and for me. Communication is key, and it will be important for you to check your RIT email and myCourses regularly this semester so that you are always “in the know”.

Continuity of Learning (Student-level)

The RIT Safety Plan includes a section specifically for students, including accommodations, travel, health, etc. <https://www.rit.edu/ready/rit-safety-plan#for-students>. This site will be updated as needed to provide important information regarding your requirements for being on campus and staying healthy.

In the event that there is a disruption in your ability to learn with us, communication is key. The faster you can communicate these disruptions with me, the easier it is to keep you on a successful path in this course. If your absence from class is due to personal illness, please contact the Disability Services Office (<https://www.rit.edu/disabilityservices/>) as soon as possible. You may also reach out to your Academic Advisor who can assist you in making all of the necessary contacts with DSO, your instructors, etc.

Changes to the University Calendar

In the event that there is a significant change to the University calendar, this syllabus will be modified to meet those changes, if necessary. Modifications will be shared immediately with our class via myCourses and communications directly from me.

Resources

Everyone in the RIT Community is dedicated to your success. With this, you need to avail yourself of help when you need it! I am, and all of your faculty are, your first stop. What can we do to help you in the course, or with navigating RIT? Your Academic Advisor should be on speed dial! They are an amazing wealth of information for you and can help you with everything professional, personally, and beyond!

In some cases you already know that you need very specific help. Have trouble with time management, note taking in class, just getting your academic self together? Check out all of the resources the RIT Academic Success Center has to offer! <https://www.rit.edu/studentaffairs/asc/> From workshops to individual coaching, they have only your success in mind.

If you still need more resources ... ask me or your Academic Advisor and we will help you pinpoint that resource. Of course asking more than two hours before you need to submit your assignment is always preferred!