

## General & Analytical Chemistry I Lab – CHMG 145 Fall 2022

Session Day, Time, Room Wednesday, 2:00-4:50 PM, GOS-2143

TA Name Rachel Hamilton Email rmh2007@rit.edu

Office Hours Tuesday 12:30-1:30 PM (GOS-2230) (next to the elevator)

ZOOM Hours During office hours, or email (zoom tab in MyCourses)

[vfmcsch@rit.edu](mailto:vfmcsch@rit.edu)

**Dr. Virginia Chang, Manager of Undergraduate  
Laboratories**

→ **COURSE DESCRIPTION** The course combines hands-on laboratory exercises with workshop-style problem sessions to complement the CHMG-141 lecture material. The course emphasizes laboratory techniques and data analysis skills.

→ **REQUIRED LABORATORY MATERIAL** • Lab Coat • Safety Goggles • Pen

→ **ATTENDANCE POLICY** *Attendance will be recorded. Students are required to physically attend lab sessions. You didn't do the experiments if you weren't there. This point is important.*

Excused absences for short-term illness need to be communicated. Illness isn't considered short-term when a student misses or anticipates missing two or more consecutive weeks due to illness. An individual plan developed with Dr. Chang will have to be in place to accommodate the student's circumstance(s).

Please don't hesitate to communicate in a timely manner with the TA and/or Dr. Chang for individual consideration if an extenuating circumstance arises. Some examples of extenuating circumstances are scheduled athletic events where you are a team participant as well as personal/family emergencies and unexpected/unplanned situations (ie. minor/major car accident/trouble, weather-related arrival to campus, etc.). Timely manner may look like a late arrival to lab (up to 30 minutes) followed by a discussion with the TA or a plan developed between you and Dr. Chang.

Individual extenuating circumstances may lead to (1) an extended due date for later submission; (2) possible lab make-up during the week with another TA if his/her session has not reached the allowed capacity and the day & time of the session is compatible with the student's schedule; (3) completing the missed lab during the built-in course make-up periods.

→ **ASSIGNMENT POLICY** *Students should stay in pace with reasonable due dates. Late work will have reasonable deductions and will not be accepted after the extended submission period.*

- Pre-Lab Assignments are expected to be submitted BEFORE attending lab. It is an indicator that students came more ready than not. Students will not be allowed to stay and start any new lab.

A zero score will be (tentatively) recorded.

- Data & Observations collected and recorded while in lab must be submitted before leaving.

A zero score will be tentatively recorded. Forgotten/Late submission will garner a 5% deduction for each day up to the next time your session meets. At that time the zero score will be permanently recorded.

- Post-Lab Reports are due no later than one week after the experiment and BEFORE starting the new lab. 24-hour late submission is allowed with a 10% deduction; subsequent late submission will have addition 5% deduction for each day up to the next time your session meets.

→ **MAKE-UP LAB POLICY** *Ideally, students attend lab regularly and will not need to make up labs.*

***Most students may not need to make up any lab during the semester.***

***However, there are almost always circumstances that occur and should not penalize students.***

There are two Make-Up Weeks. The first one is set for the week after Fall Break; the second one is set for the week after Thanksgiving. These are NOT automatically available to students.

The first Make-Up Week covers lab done in the first half of the semester before Fall Break while the second Make-Up Week covers lab done in the second half of the semester after Fall Break. No student is allowed/anticipated to make up more than one lab during a Make-Up Week nor is allowed/anticipated to attend Make-Up without prior communication or Instructor knowledge.

Here are several examples. A student:

(a) is allowed to choose to miss and make up one lab in each half of the semester. It is understandable when a student would like to do well on particular exams/projects. Must be communicated. Truth and honesty is much appreciated and can be supported by our CHMG 145 TAs Team. Let your TA know and TA will provide information to the CHMG 145 TAs Team on our Make-Up Schedule. A zero is recorded for part of or all aspects of that lab (Pre-Lab Assignment, Data & Observations, Post-Lab Report). Student will make up that lab with no deductions and the zero scores will be replaced.

(b) gets a cold during the 3<sup>rd</sup> week and cannot make it to lab. A zero will be recorded for part of or all aspects of that lab (Pre-Lab Assignment, Data & Observations, Post-Lab Report). Let your TA know and TA will provide information to the CHMG 145 TAs Team on our Make-Up Schedule. During Fall Break Week, student will make up that lab with no deductions and the zero scores will be replaced.

(c) has an extenuating circumstance that requires accommodation throughout the semester and has reached out to develop a plan with Dr. Chang. That plan may allow that student to do more than one make-up lab. That plan is only good for that student and doesn't apply to any other student.

(d) has gotten the wrong notion that two Make-Up Weeks means they can just show up twice in the semester to do the labs. NO. In Dr. Chang's mind, that student is "gaming the system" and will not gain that advantage. That student will not be allowed to make up any (perhaps not even one) lab since there has been no communication leading up to Make-Up Week. In fact, communicating a weekly cold is not good enough; by the second consecutive/inconsecutive week, that student's cold is an extenuating circumstance whether known or not that needs to be addressed for the rest of the semester.

DRY LABS are developed to present concepts to associating wet labs and do count as labs to be physically attended. Absences will be shared with our CHMG 145 TAs Team and may count against a student seeking to make up lab(s) during Make-Up Week(s). A student who misses a DRY LAB and then then attends the following wet lab without real reasons may seem to be “gaming the system” and seeking undue advantage when most students are not. Please don’t take advantage of the TA’s time and skip DRY LABS as most TAs are also RIT students. TAs will try and get students caught up on those labs before the wet labs but when anything “suspicious” seems to occur, Dr. Chang has the ultimate discretion.

→ **GRADES** The letter grade is determined from the percentage of your total points earned out of the total possible points. There are (1) Pre-Lab Assignments done outside of the lab and BEFORE attending the sessions; (2) Data and Observation collected, recorded, and submitted BEFORE leaving the sessions; (3) Post-Lab Reports due within the next week BEFORE starting the next sessions.

93-100	A	84-86	B	74-76	C	60-69	D
90-92	A-	80-83	B-	70-73	C-	below 60	F
87-89	B+	77-79	C+				

→ **ACADEMIC HONESTY & INTEGRITY** It is expected that each student will individually write a lab report for all of the 10 labs. You are welcome to work on analyzing your data together, BUT each student must write her/his own report. You must physically perform each experiment and write a report for each experiment in order to receive a passing grade for this course (this means you cannot hand in lab reports for experiments you did not perform this semester).

Handing in a lab report for an experiment you did not perform will result in an automatic zero for that report and referral to Dr. Mills, Associate Head of School of Chemistry & Materials Science for further disciplinary action.

**According to RIT's Student Academic Integrity Policy:** A breach of student academic integrity falls into three basic areas: ***cheating, duplicate submission and plagiarism.***

- A. ***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*** 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*** 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.

→ **PROCEDURES FOR HANDLING ALLEGED BREACHES OF ACADEMIC INTEGRITY**  
<https://www.rit.edu/academicaffairs/policiesmanual/d080>

→ **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.

→ **TITLE IX** RIT is committed to providing a safe learning environment, free of harassment and discrimination as articulated in our university policies located on our governance website. RIT's policies require faculty to share information about incidents of gender based discrimination and harassment with RIT's Title IX coordinator or deputy coordinators when incidents are stated to them directly. The information you provide to a non-confidential resource which includes faculty will be relayed only as necessary for the Title IX Coordinator to investigate and/or seek resolution. Even RIT Offices and employees who cannot guarantee confidentiality will maintain your privacy to the greatest extent possible.

If an individual discloses information during a public awareness event, a protest, during a class project, or advocacy event, RIT is not obligated to investigate based on this public disclosure. RIT may however use this information to further educate faculty, staff and students about prevention efforts and available resources.

If you would like to report an incident of gender based discrimination or harassment directly you may do so by using the online Sexual Harassment, Discrimination and Sexual Misconduct Reporting or anonymously by using the Compliance and Ethics Hotline.

If you have a concern related to gender-based discrimination and/or harassment and prefer to have a confidential discussion, assistance is available from any of RIT's confidential resources (listed below).

[https://www.rit.edu/fa/compliance/sites/rit.edu/fa.compliance/files/Syllabus\\_Language\\_Aug%202020.pdf](https://www.rit.edu/fa/compliance/sites/rit.edu/fa.compliance/files/Syllabus_Language_Aug%202020.pdf)

#### → **LABORATORY SAFETY**

- **Safety goggles must be worn at all times while in lab.** THE CHEMISTRY DEPARTMENT STOCKROOM DOES NOT LOAN OUT SAFETY GOGGLES.
- **Lab coats must be worn at all times while in lab.** THE CHEMISTRY DEPARTMENT STOCKROOM DOES NOT LOAN OUT LAB COATS.
- **No shorts, open toed shoes (flip flops), and exposed mid-ripts are allowed in lab.** If you come unprepared, you will not be allowed to do the lab.
- **No food or drink in the lab.**
- **No chemicals are to be poured down the drains.** Please follow the chemical disposal instructions outlined in each lab. If you are unsure of how to dispose of something, ASK.
- **No cell phones.** Cell phones are a distraction when dealing with chemicals and could result in injury to yourself or those around you.
- **Gloves must be worn at all times during an experiment.**
- **Gloves must be removed before exiting the lab.** For example, you should never use door knobs with gloves on or you will contaminate the door knob. Take your gloves off when you leave the room and put on a new pair when you return.
- **Tie back long hair.** Any long hair or loose clothing must be tied back prior to lab.

- If you wear contact lenses, you are advised to remove them before lab and wear glasses.
- **Keep a clean workspace** and be sure to clean up before you leave.
- **Report all accidents in the lab** (spills, burns, cuts, scrapes, etc.) even if you think they are minor.
- **Wash your hands before leaving the lab.**
- **No running or horseplay** in the lab.

<b>Week</b>	<b>Dates</b>	<b>Experiments</b>
1	08/22 - 08/26	Check In - Syllabus & Lab Safety
	08/29, Mon 08/30, Tues	Last Day of Add/Drop First Day to Drop with a Grade of "W"
2	08/29 - 09/02	DRY LAB - Significant Figures & Calculations - - Dimensional Analysis - (Zumdahl, Review Chapter, § R-3 and § R-5)
3	09/05 - 09/09	#1 - Measurement: Mass, Volume, Density
4	09/12 - 09/16	#2 - Solubility
5	09/19 - 09/23	DRY LAB - Stoichiometry (Zumdahl, Chapter 5)
6	09/26 - 09/30	#3 - Stoichiometry: Law of Conservation of Mass
7	10/03 - 10/07	#4 - Stoichiometry: Law of Definite Proportions
8	10/10 - 10/14	FALL BREAK - NO LABS WEEK
9	10/17 - 10/21	MAKE-UP WEEK - (LABS #1 - #4)
10	10/24 - 10/28	DRY LAB - Titration (Zumdahl, Chapter 6)
11	10/31 - 11/04	#5 - Acid-Base Titration of KHP
	11/04, Fri	Last Day to Drop with a Grade of "W"
12	11/07 - 11/11	#6 - Acid-Base Titration of White Vinegar
13	11/14 - 11/18	#7 - Redox Titration of Fe (II) to Fe (III) & Fe Supplement
14	11/21 - 11/25	Thanksgiving Holiday - NO LABS WEEK
15	11/28 - 12/02	MAKE-UP WEEK (LABS #5 - #7)
16	12/05 - 12/09	NO LABS WEEK
	12/06, Tues 12/07, Wed	Reading Day Finals starts
17	12/12 - 12/16	NO LABS WEEK
	12/14, Wed	Finals ends