

**CHEM 108 - GENERAL CHEMISTRY Laboratory**  
**Section 001; Enrollment # for LabFlow = 001; Spring 2021**

**Instructor:** Sam Johnson (Mr. Johnson)

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**Office Location:** Sims 109F

**Lecture:** This course is a 100% online course (with F2F or synchronous meeting times.)

**Lecture Meeting Times:** 6:30pm-7:50pm, Mondays, go to Blackboard, Course Tools, Blackboard Collaborate Ultra, Click on Chem 108:001 e-class.

**Course Credit Hours:** 2

**Office Hours:** Monday and Wednesday 5:00-6:30 pm or by appointment (Office Hours are Virtual)

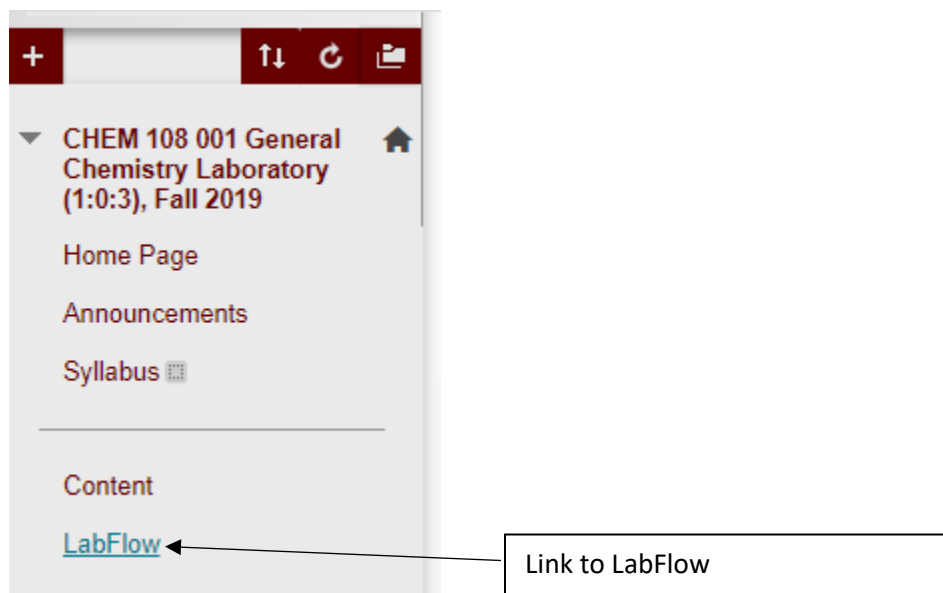
### Required Materials

- LabFlow ISBN: 978-0-9600627-0-6
- Scientific Calculator (It does not have to be a programmable calculator)
- Computer/Laptop (with audio/visual/WebCam ability)
- WiFi access

### Recommended Materials

- A textbook is useful to have as a reference resource, but is not required. If you do not have a textbook from CHEM 105, OpenStax is a good free e-textbook at <https://openstax.org/details/books/chemistry-atoms-first-2e>

### LabFlow Required Materials: Purchase NOW from the University Book Store:



The image shows a screenshot of a Blackboard course navigation menu. The menu is for the course "CHEM 108 001 General Chemistry Laboratory (1:0:3), Fall 2019". The menu items are: Home Page, Announcements, Syllabus, Content, and LabFlow. A callout box with an arrow points to the "LabFlow" link, which is labeled "Link to LabFlow".

Link to take you directly to the LabFlow website.

When creating your LabFlow account, use your Winthrop email address, use section 002 as the enrollment code (the enrollment code is the same as the section number = 002) and you will need the access code that you purchased.

**Course Objectives and Student Learning Outcomes:** Students completing this course successfully will be introduced to some laboratory and instrumental techniques that scientists use in solving problems.

**Class Preparation:** We will complete 10 labs this semester. All labs will be completed online through the LabFlow website. Most labs will run for one week, but several labs will run over a two week period. Be sure to “Read, Watch

Do”: Read the lab assignment pdf, including all of the background information. If you need additional background reading, use your textbook. Watch the required videos which will help with your understanding of the lab material and help prepare you for the prelab quiz and completion of the lab report. Work example problems so that you understand the math. Complete all practice problems, even those that are not graded. Do not fall behind; stay proactive.

**e-Class Time Commitment and Syllabus Quiz:** This course requires weekly participation. **This is a 100% online course. You will need to attend Virtual Classroom each Monday 6:30-7:50pm.** Attendance will be taken and graded! If you do not have access to electronic equipment that will allow you to enter the virtual classroom, drop the class now and move into another section. This section I teach requires the in-class virtual attendance. You must be able to use an electronic device to access Blackboard, click on Course Tools, click on Blackboard Collaborate Ultra, click on Enter Chemistry 108:002 Class. You must also be able to enable a microphone, so that you can hear me and others speaking, so that I can call on you, and you can respond for everyone to hear. You must also be able to upload files, like a PowerPoint and see the virtual BlackBoard classroom screen as I draw potential images on the virtual classroom whiteboard. Your e-attendance grades will be incorporated into Participation Points for entering the Virtual Classroom on-time/early, and having all electronic measurements (microphone, audible voices, viewing the Virtual Classroom screen) working properly throughout the ENTIRE time e-class is being held.

We may finish Monday e-class early sometimes, but e-class is not dismissed until I dismiss class. For example, leaving the classroom early or having dropped connections warrants an unexcused absence or a deduction of participation points for leaving class early. Therefore, on Monday January 10, I will hold an optional e-class from 6:30-7:30pm, where I will discuss classroom rules and protocol, and the course structure and flow. This will give you practice in making sure that your lines of communication are open electronically. There are participation points toward your grade for dialing in and entering on-time and staying logged-in successfully the entire time. Blackboard automatically keeps a log of who signs in and exits each time you enter/exit the classroom, so I have documentation of your participation. You will be expected to complete the pre-lab quiz due before a lab, and submit a lab report due a week after the lab is made available.

**Absences/tardies:** Attendance and promptness are required for e-class Mondays 6:30-7:50pm. Absences and tardiness have problematic effects on measured performance and class participation. **You are considered tardy once class time starts. Being 10 minutes or more late will result in a half-absence. Two tardies equal an absence.** Each excused tardy/absence must be verifiable, documented, and approved by me. Alternatively, you may contact the Dean of Students Office (Dr. Knight). Give Dr. Knight your documentation and she will email an absence notification to me/all the other affected professors, and then I will mark your absence/tardy as excused: Miranda L. Knight, Ph.D. Assistant Dean of Students, Winthrop University, Dean of Students Office, 246 DiGiorgio Campus Center, Rock Hill, SC 29733, 803/323-4503 (W), 803/323-4514 (FAX), knightm@winthrop.edu Having an excused absence does not excuse you from making up your homework/assignment. An excused absence allows you the privilege to work with me to re-assign your completion date in a timely manner. You are responsible for all announcements made on Blackboard/email/e-class; absence or lateness does not excuse you from this responsibility.

**Discussion Lead:** Once per semester, during the Monday e-class 6:30-7:50pm, a student will be asked to lead the discussion for the lab being covered that day. Dates/subject matter are listed at the end of the syllabus. Paired up students will split the work in half (first part of lab videos, second half of lab videos, etc.) Summarize what the lab/lab videos is/are about. Define and discuss the applications of key terms and techniques in the lab. Create a PowerPoint and email the PowerPoint to me by/well before the start time of your presentation. Be sure you can upload it to Blackboard Collaborate Ultra.

**Exams and Grading:** There will be two exams; a midterm and final. **No make-up exams will be given.** Tentative exam dates are noted on the syllabus. **There is no talking during the exam. No one may engage/talk to you during an exam. You may not talk to others during an exam. You are allowed one blank 8.5”x11” white sheet of paper during the exam to use as scratch paper. Failure to obey any of the exam instructions may warrant up to one full grade reduction for the assignment/exam or more. By “more” this means, for example, if the you are receiving assistance during an assignment/exam, you would receive a zero for the grade, and have the code of conduct violation forwarded to the dean of students for possible action from the university.**

You will receive a participation grade for entering the virtual classroom, having appropriate and working audio/visual, not entering/exiting multiple times, not exiting until class is dismissed (I will announce that class is dismissed), and participating with positive appropriate commentary. Each e-class will be recorded and made available to review after class

for each student. Each e-class will automatically record the time/date a person has entered and each time they exit/enter; this will serve as an attendance/tardiness roster.

The final exam will be administered during finals week. You have 2.5 hours to complete the Exam.

You have three business days from the time a graded assignment is returned to question its grading. After a week, no grade will be changed.

Any student caught violating the Conduct Code will receive a zero for the assignment and will be reported to the Dean of Students. Read the Winthrop University Student Conduct Code printed in the Winthrop Student Handbook. As noted in the Student Conduct Code: "Responsibility for good conduct rests with students as adult individuals." This policy on student academic misconduct is outlined in the "Student Conduct Code Academic Misconduct Policy" in the online Student Handbook at <https://www.winthrop.edu/studentconduct/winthrop-university-student-handbook.aspx>

It is against University policy and confidentiality to discuss grades through e-mail or amongst students. If you have a question about your grade, please set-up an e-meeting with times/days you'd like to meet. I will send you an email with a link to have a virtual one-on-one Blackboard e-meeting. If you have a general grading question or want me to double-check LabFlow/my calculations, an email is fine. Anything more than that and an e-meeting/seeing me (after September 8<sup>th</sup> or as deemed appropriate) is a better route to go.

### LabFlow Grading:

1. **LabFlow Safety Quiz (1x100 points=100 total points):** Lab safety quiz is completed in LabFlow.
2. **LabFlow Prelab Quizzes (10x10points=1000 total points):** Each lab will have a prelab quiz worth 10 points each. See schedule below for due dates.
3. **LabFlow Reports (10x100points=1000 total points):** Lab reports will be completed in LabFlow. After thoroughly reading the lab with background information, watching the corresponding videos and completing the prelab quiz, complete your lab report online in LabFlow. Labs are based on a "Read, Watch, Do" approach; read about the lab, watch the lab, and do the virtual lab. Pre-lab quiz questions and lab report data consist of randomized questions/data to deter cheating and ensure fairness for all. Since this is a 100% online lab, request that the lab report give you experimental data (provisional data) to use while completing the lab. Directions for selecting provisional data: <https://labflow.freshdesk.com/support/solutions/articles/43000583052-reports-using-provisional-data>

This experiment is set up to be completed completely online, or in the lab. Select how you are completing the report before beginning.

Are you completing this experiment online?

Yes

**NEXT**

This experiment is set up to be completed completely online, or in the lab. Select how you are completing the report before beginning.

Are you completing this experiment online?

Yes

If you are completing this report online, select the Provisional Data option and you will be given data to complete the lab.

**REQUEST PROVISIONAL DATA**

**TRY AGAIN**

The total points shall be as follows:

Assignment	Total Possible Points
Safety Quiz (1x100pts=100pts)	100
Prelab Quizzes (10x10pts=100pts)	100
Lab Reports (10x100pts=1000pts)	1000
Midterm Exam (1x150pts=150pts)	150

Final Exam (1x150pts=150pts)	150
Discussion/Lead Grade	100
Total possible points	1600

**Grades breakdown:**

- A=92-100%
- A-=90-91.99%
- B+=88-89.99%
- B=82-87.99%
- B-=80-81.99%
- C+=78-79.99%
- C=72-77.99%
- C-=70-71.99%
- D+, D, D-=60-70%=CR
- F=0-59.99%=UN

**Late Assignments:** Late lab assignments (pre-lab quizzes/lab reports) will be subjected to a 10% late penalty per day (per each 24 hours). For example, if a pre-lab quiz is due on a Monday 6:30pm, and you are not done with it, you might as well wait until class is over to submit it. Use your best judgement. The reason is because if you submit late at way, 6:45pm, then enter the Virtual Classroom, you will be marked as a half-absence and get the 10% late penalty. Whether you turn in your pre-lab quiz at 6:45pm that day or 6:29pm the following day, you're still going to be marked 10% off. Similarly, a lab report is due at 6:30pm on a Monday. Whether you turn it in at 6:40pm that same Monday, or the following day before 6:30pm, it is still going to be marked 10% late. Having said that, if you have a record of never turning items late, and you are late by 1-2 minutes, I might let it slide. However, if you are habitually turning in your lab reports late by 5 minutes, I will start marking your lab reports at a 10% deduction, because turning items in late and/or entering class 5 minutes late habitually is very disruptive to the e-classroom/your peers. Studies have shown that the most important facts and/or announcements a professor gives is often in the first 10 minutes of class.

**Questions:** If you have a general question, post your question on Blackboard, click on Discussion, click on "Ask a Question", click on "Create Thread", write your question, click on "Submit". For private communication, please email me directly.

**Requirements for Communicating through Email:** You are required to use your Winthrop University email address when communicating with classmates or me through email. All communications about this course will be sent to your Winthrop email address; you are required to use your Winthrop email address when sending emails.

**Expected Response Time:** I will typically respond to emails within one to two business day(s). Having said that, I will try to answer your emails as promptly as possible. I want you to see you do well in the course and would rather you ask questions to give yourself the best opportunity to do well.

**Syllabus Changes:** I reserve the right to change the syllabus anytime. An email will be sent notifying you of any changes to the syllabus.

**Course Withdraw:** Thursday, December 3, 2020 is the last day to withdraw from a full semester course with an automatic N grade issued. Students may not withdraw from a course after this date without documented extenuating circumstances as determined by the University.

**Students with Disabilities/Need of Accommodations for Access:** Winthrop University is committed to providing access to education. If you have a condition which may adversely impact your ability to access academics and/or campus

life, and you require specific accommodations to complete this course, contact the Office of Accessibility (OA) at 803-323-3290, or, [accessibility@winthrop.edu](mailto:accessibility@winthrop.edu), as early as possible to discuss your concerns.

**Tutoring:** If you are having trouble in class, check out the Academic Success Center. This is an amazing resource for time management, study skills, life-work-family-school balance. [Winthrop.edu/success/](http://Winthrop.edu/success/) For academic coaching: Michelle Wolf, Ph.D.: [wolfm@winthrop.edu](mailto:wolfm@winthrop.edu), General Questions or Concerns: [success@winthrop.edu](mailto:success@winthrop.edu)

**Student Athletes:** If you are a student athlete. Email the instructor and let the instructor know.

**University-Level Competencies:** The goals of this course align with the **University Level Competency #1-** "Winthrop graduates think critically and solve problems" and **University Level Competency #4-** "Winthrop graduates communicate effectively."

**University-Level Competencies: Competency 1: Winthrop graduates think critically and solve problems:** Winthrop University graduates reason logically, evaluate and use evidence, and solve problems. They seek out and assess relevant information from multiple viewpoints to form well-reasoned conclusions. Winthrop graduates consider the full context and consequences of their decisions and continually reexamine their own critical thinking process, including the strengths and weaknesses of their arguments. Throughout this course, students will work on developing their critical thinking and problem solving skills. Students will use their chemistry knowledge to investigate how chemistry is involved in our daily lives.

**University-Level Competencies: Competency 4: Winthrop graduates communicate effectively:** Winthrop University graduates communicate in a manner appropriate to the subject, occasion, and audience. They create texts -including but not limited to written, oral, and visual presentations-that convey content effectively. Mindful of their voice and the impact of their communication, Winthrop graduates successfully express and exchange ideas.

<b>CHEM 108 - GENERAL CHEMISTRY Laboratory Section 001 Spring 2021</b>			
Week	Open/Close Dates	Lab Topic	Assignment Due dates/times: All assignments are due at OR BEFORE the specified time; turning in assignments early is allowed.
Week 1	01/11 optional e-class 1/11, 6:30-7pm, Blackboard Collaborate Ultra)	Safety Videos and Quiz	Safety quiz due 1/25 at 11:59pm
		Chemistry Glassware and Measurement, #1	#1 Prelab quiz due 1/25 at 11:59pm #1 Lab report due 1/25 at 11:59pm
	01/18 (there is class on MLK Day)		
End of Wk1			
Week 2	2/1 (from this day forward, all e-classes are mandatory to attend)	Introduction to Laboratory Measurements, #2	#2 Prelab quiz due 2/1 at 6:30pm #2 Lab report due 2/8 at 6:30pm
Week 3	2/8	Determination of Density, #3, DL (Discussion Lead): Olivia Blacketter, Layla Carver	#3 Prelab quiz due 2/8 at 6:30pm #3 Lab report due 2/15 at 6:30pm

Week 4	<b>2/15</b>	Qualitative Analysis, #4, DL (Discussion Lead): Mary Catherine Cobb, Shamar Crews	#4 Prelab quiz due 2/15 at 6:30pm #4 Lab report due 2/22 at 6:30pm
Week 5 Week 6	<b>2/22 &amp; 3/1</b>	Chemical Reactions & Equations, #5, DL: Brooke Darr, Emma Finch	#5 Prelab quiz due 2/22 at 6:30pm Respondus Quiz due 3/1 at 6:30pm #5 Lab report due 3/8 at 6:30pm
Week 7	<b>3/8</b>	Midterm Exam, 6:30-7:50pm	Midterm Exam online (use Respondus Browser)
Week 7 Week 8	<b>3/15</b>	Acids, Bases, Buffers, pH, #6, DL: Shelbi Frederick, Brayden Fults	#6 Prelab quiz due 3/15 at 6:30pm #6 Lab report due 3/22 at 6:30pm
Week 9	<b>3/22</b>	Titration: Determining the Concentration of an Acid, #7, DL: Madison Haas, Jeremy Huff	#7 Prelab quiz due 3/22 at 6:30pm #7 Lab report due 3/29 at 6:30pm
Week 10	<b>3/29</b>	Energy and Specific Heat, #8, DL: Steven Sasko, Lauren Scamacca	#8 Prelab quiz due 3/29 at 6:30pm #8 Lab report due 4/5 at 6:30pm
Week 11 Week 12	<b>4/5 and 4/12</b>	Chemistry of Copper and Percent Yield, #9, DL: Alexis Snyder, Emily Stewart	#9 Prelab quiz due 4/5 at 6:30pm #9 Lab report due 4/12 at 6:30pm
Week 13 Week 14	<b>Class on 4/12 Class on 4/20</b>	Beer's Law and Spectrophotometry, #10, DL: Zaria Thomas, Bon Valenciano-Tovar	#10 Prelab quiz due 4/12 at 6:30pm #10 Lab report due 4/20 at 6:30pm
Finals Week	<b>4/28</b>	Final Exam, 6:30-9pm	Final Exam online (use Blackboard)