Towson University
CHEM 132L: General Chemistry II Laboratory Syllabus
CHEM 132L-002 and -007
Spring 2021

GENERAL INFORMATION

INSTRUCTOR: Dr. Courtney Thomas
OFFICE: online
E-MAIL: cthomas@towson.edu

OFFICE HOURS:
Immediately after the prelab meeting

LABORATORY TIME:
Prelab: CHEM 132L-002: Tuesday at 9 am and CHEM 132L-007: Tuesdays at 2 pm
Lab: Labflow

STUDENT RESPONSIBILITIES:

1. Attend the synchronous online prelab meeting every week (arrive on time, stay for duration)
2. Come prepared! – Read experiment BEFORE the prelab meeting
3. Complete and submit all assignments on time
4. DO NOT CHEAT

REQUIRED MATERIALS:

LABFLOW:	Use the instructions on Blackboard to register for Labflow at www.labflow.com. The cost is $30 per students to access Labflow. Students will be asked to submit payment to Labflow after the add/drop period. Quizzes and reports will be completed on-line. Therefore, a computer and stable internet access are required. Towson University provides laptops for students to borrow, as well as technology and resources support (https://www.towson.edu/scs). Here is the email address for student computing services (scs@towson.edu). Additionally, students can apply for CARES Act funding to purchase their own computer (https://www.towson.edu/studentaffairs/care/student-emergency-fund.html).
CALCULATOR:	Scientific calculator (capable of scientific notation, log functions, etc.)
LABORATORY FEES	No laboratory fees will be collected during the spring semester. You do not need to purchase a lab manual, goggles or a lab notebook.
BLACKBOARD:	Important announcements will be made available to students in electronic format on Blackboard. Students are responsible for checking Blackboard and keeping informed.

GENERAL INFORMATION

CATALOG DESCRIPTION*:*
Laboratory experiments to support concepts of General Chemistry II Lecture. Corequisite: CHEM 132 (General Chemistry II Lecture). Not open to those who have successfully completed CHEM 111. **Note: you must simultaneously be registered for this course and for CHEM 132. The only exception is if you have prior credit for CHEM 132.*

COURSE GOALS:

1. Students will display competency in essential skills required of a college graduate by: Demonstrating knowledge of methods used to collect, interpret, and apply scientific data.
2. Students will explore and integrate knowledge in order to understand how various disciplines interrelate by:
    a. Articulating relevant basic assumptions, concepts, theoretical constructs and factual information of chemistry.
    b. Understanding and applying relevant methodologies and strategies of inquiry.
    c. Applying appropriate critical-thinking/problem-solving skills and communication skills in context.
3. Students will use inquiry and critical judgment to make decisions by:
    a. Reflecting and evaluating claims and evidence (rather than merely reporting information).
    b. Thinking in complex terms that move beyond an either/or binary approach.

STUDENT LEARNING OUTCOMES:
Students will be able to:

1. Utilize scientific vocabulary and examples to describe major ideas appropriate to a specific scientific discipline.
2. Use quantitative reasoning to analyze and/or support scientific information.
3. Identify, describe critique, respond to, and construct the various components of the scientific process such as observations, inferences, operational definitions, aspects of scientific design, conclusions, control of variables, etc.
4. Explain scientific issues of current importance to society within scientific, technological, historical, societal and ethical contexts.

Copyright Notice:

LABORATORY COURSE POLICIES

ACCOMMODATIONS: Students with approved accommodations must submit their ADS memos to the instructor *the first week of class*. It is the student's responsibility to present this paperwork and to follow up regarding accommodations that require instructor participation (e.g. testing accommodations). Please contact Accessibility & Disability Services http://www.towson.edu/accessibility-disability-services/ with any further questions.

ATTENDANCE: Attendance at all prelab sessions is mandatory!

Policy: Students are expected to be on time and stay for the duration of prelab. Missing prelab, arriving late or leaving early will result in lost points. Additionally, missing any portion of prelab will negatively impact your ability to successfully complete your lab report.

Absences: *Labs that are missed cannot be made up in another section.*

Excused Absence: All absences are ***initially recorded as unexcused***. For absences to be reclassified as excused, the instructor must be provided with documentation from Student Affairs (studentaffairs@towson.edu) **within 48 hours** of the absence**.** A total of two excused absences are allowed during a semester.

Three or more absences: Consultation with the lab instructor and general chemistry coordinator is required to determine how to proceed.

Unexcused Absence: Unexcused absences will result in a **ZERO** for the missed work. Students who fail to contact the instructor by email within 48 hours of a missed session will be given a **ZERO** for points associated with that day's work.

Laboratory Time Conflict: In the case of a student who has a university sanctioned event or religious observance that will conflict with a laboratory session, the student must provide documentation to the instructor a minimum of 2 weeks in advance of the conflict date (sooner if possible). If written notification is not provided in a timely fashion, the student may receive a **ZERO** for the missed work.

LABORATORY COURSE POLICIES CONT

CHEATING: Students are subject to the Towson University Student Academic Integrity Policy, available on the university website. Cheating will NOT be tolerated. All assignments must be a student's individual work. Any work that is not original must be properly cited, otherwise it will be considered plagiarism. If you are unclear about what constitutes plagiarism, please see the instructor. *Any* violation of the university's academic integrity policy will be penalized, up to and including a grade of F *for the course* for each student involved. Letters detailing the specifics of any occurrence will be kept on file by the university for seven years.

DIVERSITY: The students, faculty, and staff at Towson University represent a diverse and vibrant community of learners and scholars. As a community, we value the unique contributions of each individual and promote active participation in all aspects of the learning process by each community member. Your instructor supports Towson University's goal of fostering a diverse and inclusive educational setting. Your instructor strives to create a classroom environment built upon the principles of mutual respect and support. Toward this end, all members participating in this course are expected to demonstrate respect for all other members of the class. If you feel these expectations have not been met, please speak with your instructor or the designated diversity liaison, Dr. Cindy Zeller (czeller@towson.edu).

For further information regarding the diversity and inclusion policies of Towson University, please see Towson University's "Strategy 1:Exposure to Diversity" , the Fisher College of Science and Mathematics Diversity Action Plan, and the Chemistry Department Diversity Action Plan.

GRADING

Grades for this course will be calculated from a total of 1110 points. Laboratory work will consist of graded quizzes, synchronous prelab meetings, and reports. The points will be assigned as described below:

GRADING	Quizzes (13 x 10 pts)	130 pts
	Prelab (13 x 20 pts)	260 pts
	Reports (12 x 60 pts)	720 pts

GRADING SCALE:	A	93-100	C+	77-79.9
	A-	90-92.9	C	70-76.9
	B+	87-89.9	D+	67-69.9
	B	83-86.9	D	60-66.9
	B-	80-82.9	F	Below 60

QUIZZES: Students take quizzes on Labflow before the prelab lecture. Videos are assigned on Labflow as prelab work. After watching the videos and reading the experiment, students take the quiz. Each quiz is worth 10 points. Quizzes must be completed on Labflow before prelab and no make-up quizzes will be given. Students have a 24 hour window to take the quiz before prelab.

PRE-LAB: Every week, the professor runs a synchronous, online prelab meeting. Students are required to attend every meeting and participate. Students earn 20 points per week: 10 points for attendance and 10 points for correct completion of group work. If a student arrives late to prelab or leaves prelab early, points will be deducted from the attendance portion of the prelab grade. Only students with a Student Affairs (studentaffairs@towson.edu) documented excused absence will be allowed to make up missed work.

REPORTS: Reports are submitted in Labflow and are worth 60 points per week. Reports received after the due date, but during the grace period (see schedule), will receive a 15 point deduction in addition to any points lost due to incorrect answers. If the instructor does not receive the report by the final acceptance deadline, zero credit will be earned.

If a student's report answers are not consistent with their unique Labflow data, or their answers are not consistent with the current semester assignment, the student will receive ZERO credit for the given report.

CHEM 132 LAB SCHEDULE SPRING 2021 – Subject to change with notice!

Dates	Expt #	Title	Report Due Date	Report Not Accept After
Monday 1/25 – Friday 1/29		Chemistry Math Review Video, Quiz, Synchronous Prelab Meeting		
Monday 2/1 – Friday 2/5	1	Using Excel for Graphing	2-9-21	2-16-21
Monday 2/8 – Friday 2/12	2	Modeling Geometry and Polarity	2-16-21	2-23-21
Monday 2/15 – Friday 2/19	3	Aqueous Solutions	2-23-21	3-2-21
Monday 2/22 – Friday 2/26	4	Molar Mass of Solute using FP Depression	3-2-21	3-9-21
Monday 3/1 – Friday 3/5	5	Kinetics of Iodine Clock Reaction	3-9-21	3-23-21
Monday 3/8 – Friday 3/12	6	Determination of an Equilibrium Constant	3-23-21	3-30-21
Monday 3/15 – Friday 3/19	SPRING BREAK			
Monday 3/22 – Friday 3/26	7	Le Chatelier's Principle	3-30-21	4-6-21
Monday 3/29 – Friday 4/2	8	pH Scale of Acid and Base Solutions	4-6-21	4-13-21
Monday 4/5 – Friday 4/9	9	Acids, Bases, and Buffers	4-13-21	4-20-21
Monday 4/12 – Friday 4/16	10	Buffer Solutions	4-20-21	4-27-21
Monday 4/19 – Friday 4/23	11	Determination of Molar Mass and Identification of a Diprotic Acid	4-27-21	5-4-21
Monday 4/26 – Friday 4/30	12	Entropy of Borax Dissolution	5-4-21	Instructor Written Permission Only
Monday 5/3 – Friday 5/7		Wrap-up		