

Chemistry 4010/6010 Laboratory Syllabus Spring 2020

Instructor: Dr. Warren Brown **Email:** wbrown15@gsu.edu

Office: ~~Langdale Hall 833~~ **Phone:** ~~404-413-5594~~

Office Hours: Consult by email

Lab hours/location: Thursday, 9am – 12:15pm, ~~NSC-242~~ by email or other online method

Text: Chem 4010/6010 Laboratory Manual; Course Lectures

Midpoint: March 3RD (the last day to drop the class with a W)

Laboratory Attendance:

Due to the measures announced by both Georgia State University and government authorities to limit the spread of SARS-CoV-2, all sessions will be online for the remainder of the semester. In place of conducting experiments in the lab I will be providing the data for the remaining labs and instructions on how to analyze the data. I will provide these through email and iCollege. During the time period and date of your lab sessions, I am fully available for any questions you may have that are relevant to this course. It is not lost on me the unprecedented nature of having to try to conduct a lab class suddenly in the middle of a semester through an online format. I am therefore open to other methods of communication with you, such as video conferencing individually or as a class if requested.

Materials relevant to Grades

Your grades will be determined by what you have submitted to me so far (for almost everyone this is report 1), lab notebook report sheets and the remaining laboratory reports.

This means 100 points each for the laboratory reports and 3 notebook reports, 50 pts each. You will not be graded on your lab notebook.

Submission of Assignments

All assignments are to be submitted through email or on iCollege.

Laboratory Reports:

Four formal laboratory reports will be required throughout the semester. Criteria used in grading the Lab Reports are: (1) your understanding of the experiment as judged by your comments and answers to questions, (2) the quality of your data, (3) the completeness and accuracy of your data analysis (including error analysis), (4) the report's clarity, organization, and quality of presentation. Lab report format should follow ACS guidelines.

Laboratory reports are **100 points each** and must be turned in on the due dates (see the Lab Schedule). After grading, the Lab Report #1 will be returned to the students with the instructor's comments and suggestions. Students will be allowed to revise, re-write, and re-submit the said

paper within one week. The re-written paper should be submitted together with earlier submitted version. Lab Reports #2-4 can be submitted only once; without an option to re-submit.

Students are required to write each paper independently, analyzing their own data and discussing accordingly. **IT IS NOT PERMITTED TO USE OTHER PEOPLE'S DATA/DISCUSSION IN THE PAPER WITHOUT A REFERENCE.** If this happens, it will be considered as plagiarism. If a student is found to have plagiarized assignments in this course, procedures will be initiated in accordance with the *Georgia State University Student Code of Conduct and Administrative Policies*. I will pursue the harshest penalty possible which can include expulsion and annotation of academic transcript. Grammar check is required for the first submission of all papers.

Late Assignments:

Late assignments will be penalized 5% of the total points available. If late for a day 20 %. Reports will not be accepted if late for more than 2 days.

Lab Course Grading:

The maximum grade for this laboratory course is **600 points**: 400pts for the formal lab reports (4×100pts), 150 pts for the notebook reports (3×50pts), 50 pts for the notebook.

Grade Disputes

The grades for all assignments are final, except in the cases of obvious errors (e.g., mathematical errors such as the addition of points). I will not discuss graded assignments during the laboratory session. Students who have legitimate concerns about how their assignment was graded will need to carry out the following steps:

1. Send an email to schedule an appointment to discuss the graded assignment. This must be done even if the student is planning to come in during office hours.
2. In the email, the student should outline the reasons why they think their assignment was not graded correctly.
3. Once I have agreed to the meeting, the student must bring the graded assignment and be on time for the scheduled meeting.

Students have a week from the time they receive the graded assignment to initiate the above procedure. Graded assignments will not be discussed after more than a week has passed. Students can discuss during the scheduled appointment, where points were lost on the graded assignment. Students are not allowed to argue for changes in how many points an instructor deems is appropriate for a specific area of the assignment or how many points the instructor deems a student should lose for an incomplete or incorrect response. For example, if the

introduction section of a lab report is graded out of 20, the student cannot request the instructor change that to some other number or request that the instructor only remove 5 points for an incomplete or incorrect answer. Please see the *Student Code of Conduct 2019-2020* for procedures for grade disputes at Georgia State University.

Interactions between Students and the Instructor

Students are to address me as Dr. Brown during in-person interactions or written communications such as emails. Students are to maintain professional and respectful behavior during lab sessions, office hours, and scheduled meetings with the instructor. Students should not use offensive language and/or display aggressive behavior (such as shouting) towards the instructor during interactions. I will not have discussions with or interact with students during the use of offensive language and/or during the display of aggressive behavior. The student will have to cease this behavior for me to communicate with them. In addition, if a student displays behavior as described above or as outlined in the *Student Code of Conduct 2019-2020* under 'Disruptive Student Conduct in the Classroom or Other Learning Environment,' the student will be given a verbal warning that the behavior is disruptive. If this behavior persists, I will initiate the process for the withdrawal of the student from the course as outlined in the *Student Code of Conduct 2019-2020*. Students should also display professional and respectful behavior towards teaching assistants, the lab coordinator, and other students.

Department of Chemistry Policy Statement Regarding Student Integrity:

The Department of Chemistry follows the university policy on academic honesty published in the "Faculty Affairs handbook" and the "On Campus: The Undergraduate Co-Curricular Affairs handbook." Any suspected offenses may be referred to the Department Chair for appropriate action.

All tests taken must represent your individual, unaided efforts. To receive or offer information during an examination is cheating. The use of unauthorized supplementary materials during tests is also cheating.

All laboratory work performed during this course must reflect your individual effort. Only original data obtained by your own laboratory experimentation are permitted to be used, except when specifically authorized by your laboratory professor. Data from supplementary sources (handbooks, reference literature, etc.) must be clearly referenced (title, author, volume, page(s), etc.). Falsification or destruction of data constitutes cheating.

Schedule of Laboratory Sessions:

Day	Lab #	Exercise	Lab Report	Lab Report Submission
1/16	1	<i>Check-in</i>		
1/23	2	GC1 - Injection technique	NO Report	
1/30	3	GC2 - Qualitative analysis	Notebook report 1	Due on April 24
2/06	4	GC3 - Quantitative analysis	Report #1	Second submission due any time before April 24.
2/13	5	GC4 - Kovats retention index		
2/20	6	GC5 - HETP	Notebook report 2	Due on April 24
2/27	7	GC6 - Temperature programming	Report #2	Due on April 3
3/05	8	GC7 - Enthalpy		
3/12	9	GC8 - Similar boiling points		
3/19 3/26	-	<i>Spring Break – No Lab</i>		
4/02	10	Thin Layer Chromatography, TLC	Report #3	Due on April 10
4/9	11	HPLC1 - Analgesics	Report #4	Due on April 17
4/16	12 A	HPLC2 - Gradient Elution	Notebook report 3	Due on April 24