CHM 105: Introductory Chemistry Laboratory (Laboratory for Chemistry 103)
Spring Semester 2020

Course Syllabus part A

Laboratory Director

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Laboratory Instructors

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Required Laboratory Materials

- CHM 105 lab manual (available at the URI Bookstore)
- RAM account and ID card, needed for purchases at the CHM Stockroom (Room 180)
- Safety glasses/goggles & knee-length lab coat (can be purchased at the Stockroom*; safety glasses will also be sold in Beaupre 115 at the start of the semester)
- For some experiments, NITRILE gloves (can be purchased at the Stockroom*)
- A scientific calculator with log and exponent functions
- Lab Prep Lessons and Announcements at the CHM 105 Sakai website
    - Students must take responsibility for carefully studying all lab materials and following all study/safety instructions.

  * Note that safety equipment can also be purchased off-campus but must be approved by the Stockroom Manager before being used in lab.

Important Spring 2020 Semester Deadlines:

- Wednesday Feb. 12th: last day to drop courses with no transcript designation of "W"
- Monday Feb. 17th: Presidents' Day, classes DO meet
- Wednesday March. 4th: last day for students to drop courses; dropping a course after this date will require the permission of your academic dean.
- Monday March 9th – Sunday March 15th: Spring Break
- Tuesday April 28th: last day of classes

The following modifications will be made as a result of the closure from March 16th to March 20th and the move to on-line instruction from March 23rd to April 3rd. If additional changes are made to the University schedule, there may also be additional changes to the course schedule and policies.

The following information describes how the CHM 105 lab will proceed during the period of remote learning, which will begin March 23rd. Each Monday a Sakai announcement will be posted explaining what students will need to do for lab that week. In some cases, this will involve using free on-line simulations to generate data for the labs, and in other cases students may be supplied with data to analyze. **Students will have until 11:55pm on Friday to complete their pre-lab assignments and report sheets**, which will be submitted to their TA through the assignments tab on the course Sakai site. Students can scan their papers to submit them or just take pictures of the completed sheets with their phone and submit the pictures. If students are not able to submit scanned images or photos, they should contact their TA to discuss other methods of submitting the assignments – typing the answers into a Word or Pages document are other options. Assignments cannot be submitted to Sakai using google docs because they cannot be opened through Sakai, but if students use google docs they can save the files as pdf files and submit the pdf version.

Grades during the remote learning period will be based on the report sheets and pre-lab assignments. There will not be any concept reviews or performance points during this time, which will reduce the total number of points used in the calculation of the course grade. One lab will be dropped to account for the week of canceled classes, and students will now be graded on 9 out of 10 experiments rather than 10 out of 11 experiments. The instructions posted each Monday will tell students which lab they will be completing that week.

During the first two hours of the lab section each week, the TA will be monitoring the google hangouts chat function on their URI email account. Students will be able to reach their TAs either through hangouts or a regular email to ask any questions that they have about the lab they are working on. If students are "present" on hangouts and asking questions, the TA will continue to monitor google hangouts until the regular end of the lab session or until all questions have been answered. If no students are "present" and asking questions, the TA will not need to monitor hangouts for the final 45 minutes of the lab section (essentially the same situation as lab ending early). Students can also email their TA at any time, and the TA will respond within 24 hours Monday to Friday. If the TA is not present on hangouts during the students' regular lab session, or students do not receive a response to an email within 24 hours Monday – Friday, the students should send the lab director an email as soon as possible so that the lab director can address the situation to make sure that the students are getting all of the help that they need. If students do not have any questions, they are not required to "attend" lab via hangouts – they just need to make sure to complete and submit the required materials by the deadline each week (Friday at 11:55pm).

Also starting next week, the TAs who regularly staff the help office will be available via google hangouts to answer questions during their regularly scheduled office hours. The TAs' URI email addresses will be added to the Office Hour schedule so that

students can reach a CHM 105 TA at a time that is convenient for them. The Office Hour schedule is available through a link on the course Sakai site, and will be updated with email addresses by March 23rd.

If additional changes and modifications need to be made, students will be notified via Sakai announcements.

While this will not be as valuable an experience as a regular hands-on lab, it will hopefully still provide students with some insights to help them to better understand their course material. When combined with the full lab experiences that students gained during the first half of the semester, completing the on-line work will be sufficient to provide students with a grade for CHM 105.

Schedule of Experiments:

Dates	Day	Experiment
1/20-1/24	M	No labs
	Tu	No labs
	W	check in
	Th	check in
	F	check in
1/27-1/31	M	No labs
	Tu	check in / Lab 1: Measurements
	W	Lab 1: Measurements
	Th	Lab 1: Measurements
	F	Lab 1: Measurements
2/3-2/7	M	No labs
	Tu	Lab 2: Density
	W	Lab 2: Density
	Th	Lab 2: Density
	F	Lab 2: Density
2/10-2/14	M	No labs
	Tu	Lab 3: Separation of a Mixture
	W	Lab 3: Separation of a Mixture
	Th	Lab 3: Separation of a Mixture
	F	Lab 3: Separation of a Mixture
2/17-2/21	M	No labs
	Tu	Lab 4: Chemical Formula
	W	Lab 4: Chemical Formula
	Th	Lab 4: Chemical Formula
	F	Lab 4: Chemical Formula
2/24-2/28	M	No labs
	Tu	Lab 5: Structure, Geom., Polarity
	W	Lab 5: Structure, Geom., Polarity
	Th	Lab 5: Structure, Geom., Polarity
	F	Lab 5: Structure, Geom., Polarity
3/2-3/6	M	No labs
	Tu	Lab 6: Six Bottle Study
	W	Lab 6: Six Bottle Study
	Th	Lab 6: Six Bottle Study
	F	Lab 6: Six Bottle Study

Dates	Day	Experiment
3/9-3/13	M	**Spring Break**
	Tu	**Spring Break**
	W	**Spring Break**
	Th	**Spring Break**
	F	**Spring Break**
3/16-3/20	M	No labs
	Tu	Lab 7: Stoichiometry
	W	Lab 7: Stoichiometry
	Th	Lab 7: Stoichiometry
	F	Lab 7: Stoichiometry
3/23-3/27	M	No labs
	Tu	Lab 8: Ideal Gas Law
	W	Lab 8: Ideal Gas Law
	Th	Lab 8: Ideal Gas Law
	F	Lab 8: Ideal Gas Law
3/30-4/3	M	No labs
	Tu	Lab 9: Solubility & Solutions
	W	Lab 9: Solubility & Solutions
	Th	Lab 9: Solubility & Solutions
	F	Lab 9: Solubility & Solutions
4/6-4/10	M	No labs
	Tu	Lab 10: Reaction Rates
	W	Lab 10: Reaction Rates
	Th	Lab 10: Reaction Rates
	F	Lab 10: Reaction Rates
4/13-4/17	M	No labs
	Tu	Lab 11: Acids, Bases, Buffers
	W	Lab 11: Acids, Bases, Buffers
	Th	Lab 11: Acids, Bases, Buffers
	F	Lab 11: Acids, Bases, Buffers
4/20-4/24	M	No labs
	Tu	Makeups
	W	Makeups
	Th	
	F	

CHM 105 Course Syllabus part B

Attendance Policy

CHM 105 is a laboratory course, which requires hands-on experimentation and direct observation of physical and chemical changes. For this reason, **students MUST be present to conduct each experiment**. Attendance is **required** at the day and time for which each student has registered. With the exception of the Safety Training session held during the first week of classes, students will not be permitted to attend a lab section other than the one for which they have officially registered, except in very limited circumstances and with the permission of the lab director.

The course includes 11 laboratory experiments, and a 12th make-up experiment. As the course grade is based on completion of 10 experiments, each student is permitted ONE absence without penalty. Any student who has a second absence MUST complete the make-up experiment on one of the designated days during the last week of classes. A reservation at the Stockroom (Beaupre 180) is required to participate in a make-up lab session. Any additional absences will result in a grade of zero for all assignments associated with the missed experiment. To receive an exception to this policy, a student must have official documentation (e.g. a notice from Dean of Students Office, a doctor's note on professional letterhead, etc.) for EVERY experiment that was missed. Documentation must be provided to the lab director within one week of the missed experiment (or return to campus from a prolonged absence).

Students who do not complete 10 experiments can expect to receive a failing grade in the course. "Complete" means the student submitted the Pre-Lab Assignment, passed the Pre-Lab Quiz, worked the experiment, and submitted the Report Sheet.

Grading Policy

The course grade will be based on the following:

10 Pre-Lab Assignments (20 points each)	200 points
10 Pre-Lab Quizzes (30 points each)	300 points
10 Lab Performance Assessments (10 points each)	100 points
10 Report Sheets (60 points each)	600 points
	1200 points

Note that for each lab experiment, students have the opportunity to earn a total of 120 points:

- 20 points for the Pre-Lab Assignment
- 30 points for the Pre-Lab Quiz
- 60 points for the Report Sheet
- 10 points for the Lab Performance Assessment

NO extra credit assignments will be given. The standard grading scale (90%+ = A-/A; 80-89% = B-/B/B+; 70-79% = C-/C/C+; 60-69% = D/D+; <60% = F) will be in effect unless modified as described below.

Grades in CHM 105 are **earned** by demonstrating mastery/proficiency in the required skills; these skills include not only chemistry laboratory techniques, but also problem-solving, critical thinking, and the ability to apply course concepts within relevant laboratory scenarios.

To be clear: Each student's grade is determined by the **quality** of that student's performance on the CHM 105 work items (described in detail below). The grade is *not* open to negotiation, and it is *not* dictated by what is needed to progress in the student's chosen program of study. The grade must be **earned** by achieving **proficiency in** (and ideally, **mastery of**) the skills identified as essential to ongoing success in the student's degree program.

The teaching assistant assigned to your section does all of the grading for the course. Contact your TA immediately if you have a problem with the grading of your work. If the problem does not get resolved through your TA, contact the course director immediately. Check the Sakai site each week to make sure that the grades on Sakai match your graded work. **No changes in grades will be made if the problem is not addressed within ONE WEEK of receiving your graded material back from your TA.**

Do not compare the grading on your work to that of a student with a different TA. All teaching assistants grade slightly differently. At the end of the semester, the course director evaluates the grades of each TA and will assign a scale to each section, **if necessary**, to ensure that the overall letter grades of the teaching assistants are fair. Please note that there is no guarantee of a scale; scales will only be applied **when necessary** to ensure that overall letter grades are fair despite variations in grading.

Students should be aware that the CHM 103 lecture and CHM 105 lab are separate courses. The lab is intended to complement the lecture by illustrating many of the lecture concepts; however, the timing of these concepts *may not* be synchronized with the lecture presentation. The lab also includes some additional concepts that are not taught in lecture.

NOTE: For those CHM 105 students currently enrolled in the CHM 103 lecture course: If you DROP the CHM 103 lecture course, you MUST ALSO DROP the CHM 105 lab.

It is recognized that some students enrolled in the CHM 105 lab may have completed the CHM 103 lecture in a previous semester or previous academic year. For this reason, each of the experiments in the lab manual is written as a complete lesson, and supplemental materials – including video tutorials – are available at the Sakai course site. Any student who does a thorough job studying the provided course materials, preparing for each experiment, practicing the required skills, and utilizing the Study Help Resources, should be able to succeed in the course.

Incomplete Policy:

Incomplete grades cannot be assigned except in the case of a real emergency. Any grade of incomplete must be approved by the department chair and the dean. In order to receive an incomplete, a student's **coursework must have been passing** and the student **must have completed at least half of the coursework for the semester.** Students receiving a grade of Incomplete should make necessary arrangements with the lab director to complete the work prior to the following midsemester. **If an incomplete is not made up prior to the two year grade change deadline established by the University, the "I" will be replaced with a grade calculated for the student based on the work completed and including zeroes for any work not completed.**

Disabilities Accommodations

Any student with a documented disability is encouraged to contact the lab director as early in the semester as possible so that we may arrange reasonable accommodations. The concept review quizzes are designed to take approximately 20 minutes. Since sufficient time must be allotted for completion of the experiment itself, those students who wish to utilize extended time accommodations will take their concept reviews in the Academic Testing Center outside of their regular lab time. If you have a chronic condition or a sports schedule that may result in missing more than one lab, please see the lab director about setting up an alternative lab session in case you miss your own.

Laboratory Work Items:

1. **Pre-Lab Assignments**

Each laboratory experiment includes a Pre-Lab Assignment so students can demonstrate that they have thoroughly prepared for their experimental work. Information about the Pre-Lab Assignments is provided in the "Remedies for Common Laboratory Ailments" discussion presented as part of the introductory material in the CHM 105 lab manual. Students must take responsibility for reviewing these materials, contacting their lab instructor with any questions, and taking the necessary steps to prepare. Pre-lab assignments are due at the start of the lab period each week and will be collected by the TA as students enter the lab. Any student who does not submit their pre-lab assignment as they enter the lab will receive a zero for the pre-lab assignment.

2. **Report Sheets**

Report Sheets are due at the NEXT lab meeting the student attends, and they must be submitted at the START of that lab session.

An immediate late penalty of 10 points will be assessed for Report Sheets not submitted to

the lab instructor at the START of the lab session. An additional 10 point late penalty will be assessed EACH business day after the due date, so that Report Sheets which are a full week late are worth ZERO points.

As described in the "Remedies" document, the Report Sheets MUST be written in blue or black ink. Your lab instructor MUST look over your data/observations and sign your Lab Notebook pages before you leave the lab.

3. **Lab Performance Assessment**

During each experiment, the lab instructor will objectively assess each student's performance in the lab and assign 0 to 10 points for appropriate laboratory behavior and technique.

Lab performance points are AWARDED for: demonstrating familiarity with the experimental procedure, demonstrating proper experimental technique, keeping personal lab bench and communal areas clean, properly (and carefully) disposing of waste, interacting appropriately with fellow students and the teaching assistant, and adhering to safety regulations.

Performance points will be DEDUCTED for: unsafe experimental technique, leaving personal lab bench or communal work areas messy (chemical spills or equipment left out/in disarray), improper disposal of chemical waste, removal of safety glasses/goggles during an experiment, non-emergency cell phone use, or disruptive behavior during the laboratory period.

4. **Concept Reviews**

Each week, students will take a short concept review quiz which will contain questions about the previous week's experiment, and will cover the material learned the previous week. Students who missed the previous week's experiment will take the concept review from the last lab that they attended. Concept reviews will be given promptly at the start of each lab period. Students who arrive late (after the concept review has been completed) will receive a zero for that concept review. For questions that require numerical answers, students will be allowed to use a simple calculator (NOT a cell phone; advanced calculators, such as the TI Nspire, with recording and internet capabilities are also prohibited). The written questions will not be provided ahead of time, so it will be essential for students to review the material from the previous week's experiment before coming to lab. **Concept review questions will cover the background information contained in the lab manual as well as the procedure and calculations done in lab.** Numbers will be provided for any calculations, so you will not need to use your own data from the lab. **Safety information and department and course policies may also be included.**

Chemistry Department Safety Policies:

- Students must be wearing their personal protective gear (lab coat and safety glasses or goggles) BEFORE they enter a teaching laboratory. (If required, nitrile gloves should be put on when students begin working on the experiment.)
- No student is permitted to enter a chemistry lab room unless they're wearing BOTH a lab coat and safety glasses or goggles. These items MUST be worn at all times while students are in a chemistry lab, and they can be removed only AFTER students have safely exited the lab room.
- Chemistry department personnel are prohibited from loaning safety glasses by State of Rhode Island health/hygiene regulations. Students who forget their safety glasses should NOT ask about loaner eyewear, and must purchase a replacement pair of safety glasses at full cost.

Any student who comes to lab without the required personal protection items will NOT be permitted to conduct the experiment and will receive a ZERO for that week's experiment.

NOTHING is more important than the personal safety of the occupants of the laboratory. Any student who deliberately or carelessly disregards a written or oral safety instruction can be expelled from the laboratory and will receive a grade of zero for the experiment. A student who is expelled twice from the laboratory for safety violations will automatically receive a failing grade in the course.

Careless disregard of safety instruction includes (but is not limited to) the following:

1. Any student who improperly disposes of chemical waste (pours solutions into laboratory sinks, or places solid waste into a garbage can).
2. Any student who is NOT wearing the following personal protection items: safety glasses or goggles, lab coat (must cover the arms to below the elbow and legs to below the knee), nitrile

gloves (when required), shoes which fully enclose the foot (no open toe or heel) and socks.

3. Any student who has NOT completed the Pre-Lab Assignment (so as to demonstrate effective preparation for that day's experiment).
4. Any student who uses a cell phone in lab without prior permission, or for reasons other than a laboratory emergency.

Students who forget to bring their personal protection items will face a costly penalty: Students with inappropriate footwear can purchase protective booties; however, a replacement pair of safety glasses or a lab coat must be purchased at full price. None of these items may be returned to the stockroom after they have been worn.

Laboratory Equipment Bills

Each lab student is responsible for the equipment provided in his/her assigned drawer. Because that drawer is shared with students in other sections, each student must **carefully** inventory the equipment in the drawer to verify that all items are present and in good working order. This inventory **must** be conducted at both the **beginning** and **end** of **every** lab period.

Students will be charged for any items that they break during their own lab section. Students will *also* be charged for any items reported missing or broken by the student who inventories that drawer at the beginning of the *next* lab section. **Make sure to verify that all equipment has been returned to your drawer before leaving lab!**

Students *must* take responsibility for checking the Chemistry Stockroom website to determine whether they have an outstanding lab equipment bill. A link to the Stockroom website is available from the CHM 105 Sakai course site. The deadline to pay lab equipment bills at the Chemistry Stockroom is at the close of business at the end of Final Exam week. Any student who has an unpaid bill at the Chemistry Stockroom after that day will have a hold placed on their e-Campus account. This hold may prevent students from registering for classes, obtaining a transcript, or obtaining a diploma.

URI Policy on Academic Honesty

Although students are conducting each experiment in pairs, **each student's Pre-Lab Assignment, Concept Review, and Lab Report Sheet MUST be completed on an individual basis.** Students who submit work that is clearly the same as another student's work are in violation of the University's Policy on Academic Honesty. Those students will be held accountable as described in that Policy.

Academic dishonesty in any form is considered a serious offense, and disciplinary action will be taken immediately. The URI policy on academic honesty is detailed in the student handbook (available online), and is summarized below:

"Students are expected to be honest in all academic work. A student's name on ANY written work, including assignments, lab reports, papers, or exams, shall be regarded as assurance that the work is the result of the student's own thought and study. Work should be stated in the student's own words, properly attributed to its source. Students have an obligation to know how to quote, paraphrase, summarize, or reference the work of others with integrity.

When students are authorized to work jointly, group effort MUST be indicated on the work submitted."

The following are some examples of academic dishonesty seen in the chemistry labs:

- Answers on pre-lab assignments, report sheets, etc. are identical, or nearly identical, to those of another student. Even just one identical answer is considered academic dishonesty. While it is acceptable to discuss lab information, each student should then work alone to answer all questions independently and in their own words.
- Having another student's completed, or partially completed, manual in your possession, or using such a manual to assist you in answering questions on your own lab work items.
- Having another student's quiz(s), pre-lab assignment(s), or report sheet(s) in your possession, or using these items to help you answer questions on your lab work items. This includes items from previous semesters.

- Unauthorized communication during concept reviews, copying from another student's concept review.
- Using unauthorized information from your lab manual or another resource during a concept review.
- Altering or attempting to alter grades.
- Changing data to match expected results or results obtained by another student.
- Providing materials for another student to copy from.

As noted in the student handbook: When there is an allegation of academic dishonesty, the instructor may fail the student for the assignment, or recommend that the student fail the course.

URI Chemistry Department plagiarism policies specific to CHM 105*:*
No section of your Pre-Lab Assignment, Concept Review, or Report Sheet can be identical (or nearly identical) to that of another student without attribution. If sections of Pre-Lab Assignments, Concept Reviews, or Report Sheets are the same (or nearly the same) as another source (e.g., a student's paper, a section of the lab handout or lecture textbook, an explanation from a TA, information posted on the internet), it will be regarded as plagiarism.

The consequence of a first instance of plagiarism is a grade of zero on that section of the graded paper. If there is a repeat instance of plagiarism, the penalty is a grade of zero on the entire Pre-Lab Assignment, Concept Review, or Report Sheet. A zero score due to a plagiarism incident will stand, and cannot be dropped as the lowest grade earned on a Lab Work Item.

You will be expected to sign the department plagiarism policy at the start of each semester that you take a chemistry lab. A copy of this policy is included in this syllabus for your reference.

Study Help Resources

- **Chemistry Graduate Student Teaching Assistants in the Beaupre 115 Learning Center**
  The Beaupre Learning Center is staffed by the Chemistry Department's Teaching Assistants and members of the AXE Chemistry fraternity, and provides a study area for preparing for lab and working problems. If you have a general question about lab, or need help with questions or calculations, you can see any one of the TAs; however, those TAs teaching the CHM 105, 102, or 114 Introductory or General Chemistry labs will be *most* familiar with the content of this course. A schedule of the Beaupre Learning Center office hours will be available via a link in your CHM 105 Sakai site as soon as the schedule for the semester has been finalized. The Beaupre Learning Center is recommended as the #1 study help resource for questions about chemistry lab courses, because the TAs actually teach the chemistry department lab courses.
- **Chemistry Tutors at the Academic Enhancement Center (AEC)**
  The AEC (www.uri.edu/aec) can help you keep up with class work and study course materials more effectively. Their staff of learning specialists and student tutors can help you identify a study approach, develop effective study strategies, understand course concepts, and practice skills productively. You can study at the AEC alone or in small groups. Please note that tutors at the AEC are not able to help with lab specific questions, but they can help you to understand the general material covered in CHM 105 and to improve your overall study skills. For the AEC schedule, please see their website (www.uri.edu/aec), call (401) 874-2367, or stop by the 4th floor in Roosevelt Hall.
- **Assistance from Dr. Donnelly, during office hours or via email**
  Dr. Donnelly's office hour schedule is available to you through URI's Starfish Success Net (link available on the course Sakai site). There are hours are available for students to schedule individual appointments (15 minute limit per day), but students are also welcome to simply walk in during office hours or at a day/time when they can see Dr. Donnelly is available. Signing up for an office hour appointment gives the student priority for that block of time.

Study Help Advice
Whether you're seeking help from Dr. Donnelly, a Chemistry Teaching Assistant, or an AEC Tutor, you'll want to arrive at your help session on time and fully prepared, to make the discussion as productive and efficient as possible. This means you should bring all relevant study/reference

materials with you to the session, including your CHM 105 lab manual, your data/observations from the lab experiment, your scientific calculator, and your written list of specific questions and/or goals for the help session.

Departmental Plagiarism Policy

One of our goals in this course is to reinforce the importance of scientific integrity. In recent years, there have been numerous examples of established scientists generating falsified data or copying material from another source. Acts of plagiarism both damage science and can have important impacts on society. The possibly falsified data associated with the connection between childhood vaccines and autism is an important recent example that has adversely affected both science and public health. Acts of plagiarism have destroyed many scientific careers. Consequently, we want to make clear to you what plagiarism is and penalize acts of plagiarism in a manner that makes clear its seriousness.

Your laboratory reports contain information about the purpose, theory and results of your experiments. Each of you prepares a laboratory report associated only with your name. By implication you are the sole author of that report, and no section of your report can be identical (or nearly identical) to that of another person without attribution. Reports or sections of reports identical to any other source whether that source is another student, a section of a book, or information obtained from others on the web will be treated as plagiarism. In a chemistry lab report, the first instance of plagiarized sections is to receive a grade of 0. For repeat instances of plagiarism, the entire report will receive a 0, and the incident will be referred to the Chair of the Chemistry Department and the Dean of your college.

In essence, for any material submitted for a grade, text that is paraphrased from a single source must be attributed to that source. In general, material should not be copied directly, but if necessary, the fact that it has been copied should be clearly indicated (quotation marks, etc.). This applies to both text and figures and to both written and power-point presentations. For example, the cutting-and-pasting of figures from web sources for use in power-point presentations is not incorrect, so long as you clearly show that you did not create the artwork and give credit to the source from which it was copied. If you have further questions about material that may constitute plagiarism, please visit www.plagiarism.org.

To avoid plagiarism in lab reports, some specific guidelines to follow when writing your report are listed below.

1. Your laboratory reports contain information about the purpose, theory and results of your experiments. Each of you prepares a laboratory report associated only with your name. Since you are the sole author of that report, no section of your report can be identical (or nearly identical) to that of another person without attribution. Reports or sections of reports identical to any other source whether that source is another student, a section of a book, or information obtained from others on the web is treated as plagiarism unless the citation is included.

2. Data analysis must be performed individually. Students often work together, and the plagiarism policy is not designed to discourage collaborative learning. However, while your original data may be identical to that of your lab partner, your calculations must be your own. The sections of your reports containing the calculations must not be identical or nearly identical to anyone else. From experience it is unlikely for any two people analyzing the same data to obtain exactly the same set of calculations in the same order with the same final results. To avoid even the appearance of plagiarism, if you work with another student, you must perform your calculations by yourself or with the help of one of the instructors. Nearly identical calculation sections are examples of plagiarism.

3. There is only one exception to the plagiarism policy given above. If you generate your data with a laboratory partner, the original data included in your report should be identical to that of your laboratory partner. The other sections of your reports, including all written work and all calculations cannot be identical to anyone including your laboratory partner.

I have read the plagiarism policy outlined above. I understand that I am responsible for my own laboratory report even when the experimental data are collected with partners. I understand that any part of a laboratory report, other than original data, identical to that of any other person is treated as plagiarism. I also understand that any section of a laboratory report taken from another source is treated as plagiarism.