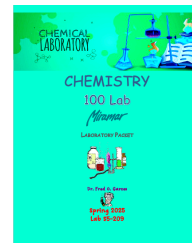


Instructor:	Dr. Fred Omega Garces
Office info.	Office Rm S6-112F Office Phone 619-388-7493
E-mail:	Via <a href="#">Canvas</a>
WebPage	<a href="http://fogarces.com">fogarces.com</a> & <a href="#">Canvas</a>
Class Meeting	MW: 6:40 – 9:45PM,
Office Hrs	M & W 2:30 – 3:30 PM, T 2 – 4 PM, F by appt via Canvas (email me in advance)
* Lab Manual	<a href="http://fogarces.com/zCourse/All_Year/Ch100_MC/a_Lab/08LbOL_LabMUL/Chem100LManual.pdf">fogarces.com/zCourse/All_Year/Ch100_MC/a_Lab/08LbOL_LabMUL/Chem100LManual.pdf</a> You can also purchase from Miramesa Copy ~\$27.00. <a href="https://www.miramesacopy.com/">https://www.miramesacopy.com/</a>
Supplies	Calculator capable of scientific notations and exponential display. * Safety Goggles and Lab coat, have this before the first wet lab. * Nitrile Gloves and Combination Master lock from Miramar Bookstore

\*Bring the lab manual, lock, gloves, safety goggles and PPE (Personal Protective Equipment) by the third week otherwise you will not be permitted to work in the lab. No exceptions.



### Student Learning Outcomes:

1. Students will be able to demonstrate knowledge of proper laboratory safety procedures.
2. Students will be able to demonstrate proper handling of chemical reagents and chemical wastes.
3. Students will be introduced to common laboratory equipment and its use.
4. Students will demonstrate basic data observation, collection, and interpretation.

Co-requisite: Chemistry 100.

If an experiment requires a prelab assignment, you will have to submit the assignment prior to performing the experiment in class. Moreover, before each lab period, you should have already read the lab experiment, and the related information found in your textbook. To ensure that you have read the lab, prelab quizzes will be given at the beginning of each lab meeting.

Laboratory work includes basic manipulations such as weighing on an electronic scale, liquid transfer with burettes and pipettes, assembly of chemical apparatus, heating, and working with chemical and solvents safety. Each lab assignment consists of a data sheet that includes observations made during the experiments, calculations and interpretations of the data. These data sheets are due at the end of the lab period the day the experiment is performed. If a portion of the lab is assigned as homework, it will be due the following lab meeting. A 10-pt penalty is imposed for each lab meeting it is late. Plagiarize of report from other students is strictly prohibited. Zero credit will be given to all parties involved in plagiarism or copying of assignment on lab report, homework, quizzes, and exams. If you give someone paper and they copy your work, then you too are in violation of the academic integrity code, whether you know they copy your paper or not. In other words, even if you did not copy the fact that someone copied your paper means that you too are responsible and will be penalized.

Plagiarize assignments will automatically receive a zero score. Plagiarize may include, but is not limited to, assignments submitted from students that have identical written answers. All parties involved will automatically receive a score of zero and may be subjected to other disciplinary actions.

Without a valid excuse, experiments cannot be made-up. If circumstances warrant, makeup labs can only be scheduled in the other lab sections for that week with both instructor approval. If you fail to complete more than three (3) scheduled lab exercise/experiments (excused or unexcused), you will most likely fail this course!!!

Tentative Schedule Feb 02, 2025 100 Lab Schedule CRN 83612/83613 Spring 2025		
Week	Date	Lab Assignment ..... fogarces.com
1	03-Feb	Safety Training, Check-in: <b>Safety Quiz, due by 11:59 PM of lab meeting, Syllabus Quiz due by Feb 18</b>
2	10-Feb	01Lab   <b>Exercise-01A &amp; 01B</b> : Basic Math and Dimensional Analysis
3	17- Feb	02Lab-  <b>Experiment-01</b> : A Penny for Your Thought; Scientific Method Introduction
4	24- Feb	03Lab   <b>Experiment-02</b> : Measurements, the Metric System and Density
5	03-Mar	04Lab   <b>Experiment-03</b> : Studying Density, Miscibility, and Solubility of Liquids
6	10-Mar	05Lab   <b>Experiment-04</b> : Separation of a Ternary Mixture
7	17-Mar	06 Lab   <b>Exercise- 02</b> : Nomenclature
8	24-Mar	07 Lab   <b>Exercise- 03</b> : Lewis Structures & VSEPR Theory
9	31-Mar	Easter Break
10	07-Apr	<b>MidTerm and Lab Practical</b>
11	14-Apr	08 Lab   <b>Exercise- 04</b> : Balancing Chemical Equations & Stoichiometry Exercise
12	21-Apr	09 Lab   <b>Experiment-05</b> : Observing Chemical Reactions
13	28-Apr	10 Lab   <b>Experiment-06</b> : The Mole, Counting by Weighing
14	05-May	11 Lab   <b>Experiment-07</b> : Using Gas Laws to Identify an Unknown Liquid
15	12-May	12 Lab   <b>Experiment-08</b> : Concentration of a Salt Solution
16	19-May	13 Lab   <b>Experiment-09</b> : Titration of Unknown Concentration of Vinegar
17	26-May	<b>MidTerm and Lab Practical (Check Out)</b>

	Grading Scale	Points
	9 Experiments, best 8* @ 50 pts	400
	4 Activities, best 4* @ 50 pts	200
	Safety Syllabus & Exams 275 pts	275
	Lab Practical 75 pts	75
	Participation / Techniques / Cleanup 50 pts	50
	<b>Total</b>	<b>1000</b>

\* 12 of 13 experiments/activities will be used to calculate your total score for the lab assignments.

Note: If you forget to turn in an assignment and it is late, then all assignment will count, and none will be dropped in determining your total score. Your total will be normalized to the max possible.

**Important Dates:**

Feb 14 – Last date to drop with no “W” in transcript.

Mar 31 to Apr 04 – Spring Break

Jun 02 – End of semester

Feb 14 & 17 – President’s Day, No Classes

April 18 – Last day to withdraw from classes with a “W”

If you are in short supply of chemicals or need to return chemicals or equipment to the chem. stockroom, contact the lab tech or the instructor. Lab Technician:

Bryce Thompson. (619) 388-7826 [bthompson001@sdccd.edu](mailto:bthompson001@sdccd.edu) Office: S5-211

Jessica Kramer (619) 388 1291 [jkramer@sdccd.edu](mailto:jkramer@sdccd.edu) Office: S5-211

## ATTENDANCE

Students with **two unexcused absences** will be dropped from the lab and will not be reinstated. **Arriving late to the laboratory may constitute an unexcused absence.** It is your responsibility to arrive on time to all laboratory sessions. You will not be given extra time when quizzes are given at the beginning of a class period if you arrive late. **If you attend a laboratory session, but do not participate in the laboratory activities you will not receive credit for the lab of the day.** You must submit the data sheet at the end of each lab meeting to receive credit for the experiment. You cannot turn in one data sheet as a group unless the instructor gives permission. If a group datasheet is turned in for a lab without instructor authorization, the grade will be dividing equally among all members in the group. Missing three or more lab meetings (excuse or unexcused) is grounds for failure in this class.

Absences are excused **by permission from your instructor only**. It is vital that you **communicate** with me if you are absent. The lowest lab experiment (excluding the first experiment) and the lowest activities are dropped with your total points based on the remaining experiments and activities (exercises). If you miss a lab meeting or fail to turn in an activity in time, then that will be the lab experiment and or activity that is dropped. If you miss more than the allocated number of experiments per half-semester you will receive a zero for that lab. No exceptions.

## GRADING & EVALUATION

- Experiments:** There will ten (10) experiments worth 50 points each (see laboratory schedule for dates). The lowest experiments score will be dropped and replaced by average of the remaining nine experiment. Points for experiments will be based on completion of experiment data sheets from the laboratory manual plus other written work as assigned by the instructor. (10 x 55 pts) = Total 550 pts.
- Activities:** There will be six (6) exercises worth 25 points each. The lowest of these will be dropped and the score replaced by the average of the remaining five. (6 x 25) = Total 150 pts.
- Safety and Syllabus Quiz:** There will be a safety quiz (25 pts), a syllabus quiz (25 pts). The safety quiz will be given on the first week. It will be open book. The syllabus quiz must be taken by Sept 01, it will be available through Blackboard.(Total: 50 pts.)
- Midterm & Final:** A midterm/practical (75pts) will cover the first half of the semester. You will be allowed to use your graded reports. The final/practical (125 pts each) will cover the entire course, first half and second half, with a greater emphasis on the second half. The lab practical will assess your skill in basic laboratory techniques, such as measuring mass, volume, temperature length. (Total: 200 pts.)
- Lab Techniques:** Finally, your lab technique skills will be graded in this course. This grade is based on your attendance, your techniques on lab safety and adhering to the conduct in the laboratory. (Total: 50 pts.)

**Course Grade:** Course grade will be determined as outline below. Evidence of improvement during the semester will be considered when assigning final letter grade. **Total points possible = 1000**

Grade evaluation:	8 Experiments (50pts)	400
	4 Exercises	200
	Safety & Syllabus	50
	Midterm & Practical	75
	Final & Practical	125
	<u>Lab Technique</u>	<u>50</u>
	* Total	1000

Grading System	A =	90% - 100%
<b>Tentative scale</b>	B =	80% - 89%
	C =	65% - 79%
	D =	55% - 64%
	F =	0 - 59%

**PLEASE NOTE!** Even if you stop attending class, but you remain on the course roster after the final drop date, your instructor **is required** to assign a grade for your class performance. Therefore, if you want to be certain that you have been dropped from the course, it is your responsibility to drop the class through the admissions office prior to the final drop date that is printed in the Miramar College class schedule. Please review Miramar College academic integrity policy 3100-Student rights, Responsibilities and Administrative Due process at <http://hr.sdccd.net/hr/studtoc.htm>.

This course will require good time management to keep up with the work. **If at any time your average for this course drops below 30% of the total points to date, you will be dropped for non-participation.**

## Very Important Notes

1. **Lab Equipment and Supplies:** You are responsible for purchasing PPE and a scientific calculator for this course. Before starting your first experiment, you must bring your PPE to class. You will also need a scientific calculator with the ability to display scientific notation, base-10 and natural logarithms, and perform operations with powers or roots (e.g.,  $y^x$ ,  $2^V$ , or nth root). Consult your instructor if you need assistance with your calculator or its functions.
2. **Attendance and Participation:** Regular attendance is crucial for success. Missing three or more lab sessions will result in failure of the course. If you need to miss a lab, notify your instructor as soon as possible. Active participation during experiments is essential, and you must submit your data sheet at the end of each lab session. Unauthorized group submissions will result in an equal division of the grade among all members.
3. **Exams:** During exams, you may need to solve numerical problems using scratch paper. Label your work clearly, show all steps for solutions, and box or underline your final answers. Neatness is crucial; unclear work may not receive credit. Both the midterm and final exams will require your signature to confirm agreement to the course honesty policy. Failure to sign may result in a score penalty.
4. **Assignments:** You are responsible for submitting your assignments in lab after completing the experiment. Late submissions will not be accepted, but your lowest experiment and activity score will be dropped. Ensure that all work is completed individually. Plagiarism or identical work submitted by multiple students will result in disciplinary action. Follow the specified instructions carefully to ensure proper grading.
5. **Dropping the Course:** If you decide to drop the course, you must visit the registration office to officially withdraw. Failing to attend or complete assignments does not constitute withdrawal.
6. **Collaboration:** Collaboration is encouraged for discussing results, but each student is responsible for their own work. Plagiarism or copying another student's work will result in a zero for the assignment and possible dismissal from the course.
7. **Academic Integrity:** Academic dishonesty, including cheating and plagiarism, will result in a zero for the assignment and possibly disciplinary action. Work individually during exams and when writing reports. You are expected to adhere to the college's code of conduct and help uphold academic integrity.
8. **Incompletes:** If you encounter a medical hardship and have completed at least 85% of the course, you may petition for an incomplete grade. Instructor approval is required, and a contract will outline how to make up the incomplete grade.
9. **Final Grades:** Final grades will be posted no later than one week after the end of the semester.

## Special Services

•**Tutoring:** The ASC (Academic Success Center) offers free peer-to-peer tutoring services. It is supervised by a credentialed instructor and focuses on various subjects such as reading, writing, study skills, problem-solving, and math across the curriculum. Content tutoring is also available. If you need more information about the tutoring service, consult your instructor or visit the ASC. Tutoring is not available during the summer.

•**Disability Support Program & Services (DSPS):** Students with learning or physical disabilities should contact both their instructor and the DSPS (Disability Support Program Programs and Services) to discuss and arrange special accommodations for the classroom or exams. The DSPS office is in building K-204, and you can reach them at (619) 388-7312 and Services) to arrange special classroom or exam accommodations. DSPS is in building K-204 and can be reached at (619) 388-7312

•**American Chemical Society (ACS), Student Affiliates:** You can join the science club, which is affiliated with the American Chemical Society. By becoming a member, you can participate in exciting science-related experiences and connect with fellow students who share an interest in science. The ACS Student Affiliate (not to be confused with ACS mentioned above) also organizes the recycling program on campus. This club is open to all Miramar students, faculty, and staff.

•**Science Center:** During this term, faculty members and former students will be present in the Help Room located in S6-112 C. This Help Room serves as a place where you can get your questions answered specifically for this course. More details about the schedule will be provided later. Please note that the Science Center may not be open during the summer or inter-sessions.

It's important to mention that if the instructor deems it necessary, the course syllabus may be modified, and you will be provided with an updated copy of the new syllabus. 01/11/25

# SAN DIEGO MIRAMAR COLLEGE

## Guidelines for Addressing Academic Honesty

Honesty and integrity are integral components of the academic process. Students are expected to be honest and ethical at all times in their pursuit of academic goals.

### *What is Cheating?*

Cheating is the act of obtaining or attempting to obtain credit for academic work by the use of any dishonest, deceptive, or fraudulent means. Examples of cheating include, but are not limited to:

- Copying from another's test or exam
- Obtaining copies of a test, exam or course material without permission from the instructor
- Using unauthorized information/materials, phones or other devices to take a test
- Falsifying records, laboratory work, or other course data
- Submitting work previously presented in another course
- Altering or interfering with grading procedures
- Plagiarizing, as defined below
- Knowingly assisting another in any of the above
- Engaging in activities that unfairly place other students at a disadvantage, such as taking, hiding, or altering resource materials.

### *What is Plagiarism?*

Plagiarism is the act of incorporating ideas, words, or specific substance of another and submitting the same as one's own work to fulfill academic requirements without giving credit to the appropriate sources. Examples of plagiarism include but are not limited to:

- Submitting work completed/translated by another
- Omitting footnotes for ideas, statements, or facts which belong to another
- Omitting quotation marks when quoting directly from another
- Close and lengthy paraphrasing of the writing or work of another, with or without acknowledgment
- Submitting artistic works of another
- Submitting papers purchased from research companies (or downloaded) as one's own work

### *Prevention*

It is highly recommended that the course syllabus outline the standards of academic honesty expected in the course. This syllabus should also outline possible academic and administrative sanctions should dishonesty occur. This information should be reviewed with the class (sample statements for syllabi are available from the Dean of Student Affairs). In addition, set clear expectations before every exam (i.e. announce that devices cannot be used prior to the start of the exam).

### *Recommended Actions*

1. Faculty have the right to respond to academic dishonesty within the context of their own course in a manner they deem appropriate up to and including the rejection of student work, with work and/or course grading consequences to follow. The usual sanction is "grade modification" on a given assignment/exam and/or course and should only be used if the faculty has reasonable evidence that academic dishonesty did occur.
2. When dishonesty is detected and resulting action taken, the instructor must promptly tell the student and indicate any actions to be taken. A written letter should be provided to the student if any formal action is taken, such as a grade modification. The letter should include: The course title, the date/time of the incident, the nature of the incident, the action to be taken/sanction to be handed down, and the process for appeal (sample letters are available from the Dean of Student Affairs).
3. If an academic sanction, such as a grade modification, is imposed the incident must be reported within ten instructional days to the Department Chair, School Dean, and Dean of Student Affairs (this can be achieved by "cc'ing" them on the student letter).
4. If in addition to the academic sanction, an administrative sanction will be pursued, the Dean of Student Affairs will notify the faculty member. Typically, severe cases of academic dishonesty and/or repeat offenses may warrant an administrative sanction, up to and including suspension and expulsion.

For information, please call the Dean of Student Affairs:  
(619) 388-7313

Office of Student Affairs, S101  
San Diego Miramar College  
10440 Black Mountain Rd.  
San Diego, CA 92126

*For a complete copy of the Honest Academic  
Conduct Procedure, 3100.3, visit:*

[https://www.sdccd.edu/docs/District/procedures/Student%20Services/AP%203100\\_03.pdf](https://www.sdccd.edu/docs/District/procedures/Student%20Services/AP%203100_03.pdf)



# Collaboration Vs Dishonesty

What is the difference between working collaboratively verses committing academic misconduct? Students can begin to answer this by asking themselves the following questions:

**Is this assignment meant to evaluate my own individual knowledge and skills?**

If yes, then it must be your own work. It is also best to assume that all coursework is individual, unless explicitly labelled as group-work by the faculty member.

**Am I working with others on general skills, or on a specific assignment?**

Working together to solve problems, explore challenging ideas or learn new skills are examples of collaboration. Pooling effort on a piece of coursework which has not be explicitly labelled as group work is an example academic dishonesty.

The chart below displays the differences between Collaboration and Academic Dishonesty\*.

Collaboration	Academic Dishonesty
Revising with friends and quizzing each other on course material	Sitting for an online exam together (including using instant messaging to discuss the exam while it is ongoing)
Discussing an assignment briefly with friends	Sharing draft assignments with friends and copying words/ideas/structure from each other
Working on a group project together, spreading the work equally around the group	Deciding the “smartest” person in the group should do all the work so everyone gets the best grade
Asking your friend to help you improve your skills with an element of essay writing (structure, referencing, etc...)	Asking your friend to edit your essay for you
Discussing course concepts and building on each other’s ideas	Planning specific exam answers
Directing your friend to resources to improve their academic skills (see academic skills centre)	Writing your friend's assignment or sitting for their exam for them
Mentioning a helpful source to a friend	Sending your full bibliography to a friend
Sharing work with members of your group on a collaborative project	Sharing your group's work with friends in another group
Finding sources online and citing them correctly in your essay	Buying an essay from a website
Each study group member revising one section of a module and teaching the others	Each group member prepping an exam answer for everyone to copy

\*This chart was developed by Dr. Rachel Horrocks-Birss, Academic Skills Centre, University of Dundee

## San Diego Community College District

### Student Academic Integrity and Laboratory Safety Agreement

This agreement outlines the principles of academic integrity, ethical conduct, and laboratory safety that students at the San Diego Community College District are expected to uphold. By signing this document, students commit to maintaining the highest standards of honesty and integrity in their academic pursuits.

#### Academic Honesty

Students are expected to always be honest and ethical in their pursuit of academic goals. Cheating and plagiarism are serious offenses that undermine the educational process. Cheating includes, but is not limited to, copying from another's test, discussing answers during tests without permission, obtaining unauthorized course materials, using unauthorized aids during exams, collaborating without approval, falsifying records, altering grading procedures, and knowingly assisting another student in these activities<sup>1</sup>. Plagiarism is the act of incorporating ideas, words, or specific substance of another without proper attribution. This includes submitting work completed by another, omitting proper citations, failing to use quotation marks for direct quotes, closely paraphrasing without acknowledgment, submitting artistic works of others as one's own, and using papers from research companies or electronic sources.

#### Ethical Conduct

Students are expected to adhere to the District's Code of Ethics by respecting the diversity, integrity, and professionalism of all members of the campus community. This includes maintaining a harassment-free and discrimination-free environment, supporting established policies and procedures, participating positively in the shared governance process, and protecting District assets. Students should avoid conflicts of interest, maintain confidentiality of student and staff information, strive for personal and professional growth, and be honest and accountable in all actions and activities.

#### Laboratory Safety

When conducting experiments, students must prioritize safety by always wearing safety goggles when handling chemicals, following proper procedures for smelling chemicals, using protective gloves, maintaining a clean work area, properly disposing of waste products, refraining from eating or drinking in the laboratory, and avoiding horseplay. Students should have a fire extinguisher nearby when using flames and know how to use it. If unsure about any procedure or chemical handling, students should seek instructor guidance immediately.

#### Consequences and Commitment

Violations of academic integrity may result in academic sanctions, such as grade modifications, determined by the faculty member, and administrative sanctions, including disciplinary action up to expulsion, determined by the College president or designated representative

#### Affirmation

By signing this agreement, students affirm that they have read, understood, and agree to abide by all the principles and policies outlined above. They recognize that adherence to these standards is essential for maintaining the integrity of their education and the reputation of the San Diego Community College District.

Print Name: \_\_\_\_\_ CSID \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_