We are going to have a FUN semester as we journey through our course together in becoming better Citizens of Science!

Molecules like to have fun too—physical FONH & chemically react!

Our intention in this course is to help each other in becoming better “Citizens of Science.” I am excited about that & I hope we have fun too!!!

I’ll be reaching out to you often and hope you’ll be reaching out to me to see how we can help each other. Sincerely, DrGergens

My visiting (office) hours are posted on my office door, MS 415F, & I promptly reply to emails having an appropriate subject heading beginning with a course identifier (i.e., CHEM100L). My email is dgergens@sdccd.edu

IMPORTANT: Multiple methods of teaching and measuring performance and understanding will be given in the form of in- and out-of-classroom course activities (including online). Blackboard course management software is used in this course to make announcements, coordinate dialogue and discussions, deliver various content and assessment printable hardcopies of course activities to be turned in for grading, and to assess your basic knowledge of the student learning objectives linked to your syllabus for our course—see COR link under Methods of Evaluation (syllabus page 3). A course activity with its directions and guidelines, availability period and due date will be announced in Blackboard under Announcements. Blackboard accounts will become available on the first day school starts or within 24 hours of adding our course.

Safety First. Please complete the TWO safety quizzes under Assessments in Blackboard. This is not an option, and unfortunately you will be dropped from our course if you do not complete the TWO safety quizzes by their due date of June 19, so please be mindful of safety in our course and in completing our two safety quizzes. Our directions for logging into and using your Blackboard account to complete these are linked at GETTING STARTED—completing Steps 1-8: http://homework.sdmesa.edu/dgergens/getting_started.html

Time Management: For this course, outside-of-classroom (i.e., pre- and post-laboratory work, reading the textbook, homework preparation, printing out resources & work) time will be needed per week as we journey through the laboratory schedule of activities (syllabus page 9) to satisfactorily meet the student learning objectives while performing course (laboratory) activities safely in a laboratory setting. Our schedule of activities and due dates will change depending on student need and pace as we adjust instruction to improve student learning, success and performance in mastering the material. A course activity with its directions and guidelines, availability period and due date will be announced in Blackboard under Announcements.
Fundamentals of Chemistry Laboratory - Chemistry 100L
3 hours/week; 1.0 unit

Course Description: This laboratory course is designed to illustrate the principles of inorganic and physical chemistry and to familiarize students with scientific reasoning, basic laboratory equipment and safe practices, scientific data collection methods and interpretation. This laboratory course is intended for students majoring in nursing, nutrition and allied health sciences, and provides a foundation for future lab work in chemistry. Please read through most current San Diego Mesa Catalog for general information about transferability information for this course, college, and details regarding other course descriptions.

Prerequisite: MATH 046 (Elementary Algebra and Geometry) or MATH 092 (Applied Beginning & Intermediate Algebra) with a grade of "C" or better, or equivalent, or Assessment Skill Levels M40/M45.

Corequisite: Completion of or concurrent enrollment in Chemistry 100 with a grade of "C" or better, or equivalent.

Computer Skills Advisory: Entry level computer skills are expected on types of assignments requiring computer skills. (In most college courses students are expected to have a basic familiarity with computer terms and use: word processing, document manipulation, spreadsheets, email, and online services. These skills can be learned at any of the colleges or Continuing Education.)

Required Texts:
Generate a required textbook list for this course with current ISBNs at https://www.bookstore.sdccd.edu/mesa/
The required text for the lab component is a packet entitled:
• Chemistry 100L Lab Packet at the San Diego Mesa College Campus Bookstore

Additional course materials for our journey together:
• Safety goggles (Z87 approved)
• Laboratory Apron or Coat
• MASTER V-629 lock
• Laboratory notebook of your design – cannot be a electronic notebook
• USB or Flash Drive
• You can arrange to use a printer or can print from campus if you need to.

Personal Laboratory Equipment & Lockers: You must have a pair of safety goggles (Z87 approved), an apron, and a MASTER V-629 before you can have access to your laboratory locker. NOTE: Failure to check-out of your locker before the end of the semester will result in a locker fine.
Need Help? Are you open to the learning process and helping each other on this journey?

If something is not working or if you have any questions, please contact me immediately by email.

- For prompt replies & help, please always email me using an appropriate subject heading beginning with: CHEM100L at: dgergens@sdccd.edu
- We filter spam emails. An email without an appropriate CHEM100L subject heading is deleted.
- Visiting & Tutoring Hours: I am available so please stop by, or by scheduling an appointment. Visiting hours are posted on my office door, MS-415F.
- Tutoring Services: Please see page of 5 of our syllabus.

Feedback is a Gift. From my perspective, your feedback on what you know, what you don't know, and how to improve our course is very much appreciated. Lack of communication is not an option. So be open, and let me know how it is going as we master the fundamentals of chemistry in our course. Thank You. Sincerely, Dr. Gergens

PS – Please also be aware of directions, guidelines and course expectations by carefully reading through all resources.

Withdrawing from Our Course: It is your responsibility to withdraw and drop from the course by the published deadlines. It is also helpful to discuss your intentions with me before withdrawing/dropping our course; see page 7 in your syllabus for our classic calendar for important dates, and of major course events. Please keep in mind, if you are in nonattendance you will be dropped by me.

Performance/Attendance: Key performance indicators show our students making the grade when they are in regular attendance participating in creating a positive course environment. District policy says students in nonattendance are to be dropped from a course. Criteria for being in nonattendance in our course are:

- If you do not attend the first course meeting, you will be dropped.
- If you have two or more absences in our course.

Examples of nonattendance are: excused and unexcused absences, and missing course activities.

Absences: Absences are considered nonattendance and your limit are two. You are responsible for all missing course content & activities (lectures, announcements, assessments, handouts, work, etc) during your absence.

There are two types of absences—excused and unexcused.

- Excused absence. An absence will be marked excused if you provide advance notification by emailing me prior or on the day of your nonattendance. Staying in contact with me by email during any absence is very important. Only missing “excused absence” course activities are allowed to be made-up if our “procedures for make-ups (see below)” is followed.
- Unexcused absence. Missing activities during an “unexcused absence” cannot be made-up, and missing activities receive zero credit. An unexcused absence will be marked as nonattendance for the following reasons:
  A) If you are not present during roll call—like when attending your companion laboratory course—you will be marked having an unexcused absence. Roll call will happen at anytime during our time together.
  B) Receiving zero credit for any course activity by not completing it during its availability period will be marked as an unexcused absence.
  C) Truancies—late arrival or early exiting—from the course will be considered as an unexcused absence.

Procedures for Make-ups: We are not obligated in allowing make-ups for missed course activities due to nonattendance. Course activities missed during an “unexcused absence” cannot be made-up. For an “excused absence,” not scheduling a meeting by email on the day of or prior your absence forfeits your possibility in making-up any missing activity and making-up any missing “excused absence” activity will only be considered if it is safe to do so within the construct of our laboratory schedule and setting. NOTE: I am not obligated to consider other absences as excused and can require you to provide documentation for “excused absences.”

Accommodation for Disability: If you are in need of academic accommodations due to a disability, please schedule an appointment with me—and with your DSPS counselor if you have one—during the first week of our course to discuss our options.
Methods of Evaluation:
Your success will be evaluated based on a number of course (laboratory) activities, while performing these activities working safely in a laboratory setting, relevant to the student learning objectives given in the course outline of record (COR)—see http://homework.sdmesa.edu/dgergens/chem100L/COR.html

A final grade of "C" or better will indicate the student can successfully apply the principles and techniques taught in this course and in subsequent courses and can, therefore, perform satisfactorily without notes or instructor assistance. Course activities and the learning process will also measure critical thinking skills. These methods will include, but are not limited to the following:

1. Reading through the laboratory experiment, completing Blackboard assessments and writing a purpose before coming to class as to why you are conducting the scheduled experiment (syllabus page 5 – Part 1)
2. Writing accurate and precise observations during experimentation, labeling diagrams and procedures into your notebook according to directions and guidelines provided (syllabus page 5 – Parts 1 & 2)
3. Summarizing your results including writing detailed answers to the final four questions (syllabus page 5 – Part 3)
4. Writing & word processing formal reports (syllabus page 6 – Parts 4 & 5)
5. Successful and accurate completion of your laboratory packet pages (syllabus pages 5 & 6 – Parts 1-5)
6. Completing objective unit assessments proctored in the laboratory and/or online that reflect the content covered in that unit. Assessments will ask both quantitative and qualitative questions.
7. Successful completion of assessments: course activities, mini-celebrations and a comprehensive final celebration.

A course activity with its directions and guidelines, availability period and due date will be announced in Blackboard under Announcements. Our laboratory schedule (syllabus page 9) and due dates will change depending on student need and pace as we adjust instruction to improve student learning, success and performance in mastering the material. Selected laboratory course activities will be graded and/or marked as GLP* completed. The points earned for each assessment within each course activity category is to be recorded on your grade sheet and counts toward your final Overall Percentage Grade of Achievement. Please place your completed grade sheet into your laboratory notebook.

### Overall Percentage Grade of Achievement Calculation

<table>
<thead>
<tr>
<th>Course Activity</th>
<th>Percent of Final Grade</th>
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<tr>
<td>Laboratory Activities</td>
<td>75%</td>
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<tr>
<td>Laboratory Notebook</td>
<td>5%</td>
</tr>
<tr>
<td>Final-Celebration</td>
<td>20%</td>
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Weighted percentages (percent of final grade), a grade sheet (page 10), & directions to calculate your overall percentage grade are linked at http://homework.sdmesa.edu/dgergens/grade_directions.html

Your overall percentage grade will be applied to the grading scale & recorded

A ≥ 89%  B ≥ 77%  C ≥ 65%  D ≥ 50%  F < 50%

PLEASE NOTE: Blackboard does not calculate your overall grade but will show points earned on assessments. Scheduling a meeting to review your grade requires you bringing your completed grade sheet & laboratory notebook—filled in with grades as described in the link above—to our meeting. Having your grade sheet filled out & laboratory notebook at our meeting is must before we can have our discussion regarding your grade calculation.

⚠️ **A warning about turning course activities in late**: Be time-on-task. Course activities (i.e., assessment, exercise, etc.) not submitted when asked to do so by me or when prompted to so by Blackboard will receive a grade reduction; one-percent grade reduction per every one-minute late. Any exercise mailed to me will receive a 10% grade reduction per every day late past the submission and postmark date.

*Good Laboratory Practice (GLP) violations*: You will receive a 5% overall grade reduction per violation per experiment and/or zero credit for your work if you violate any GLP or zero tolerance policy; see syllabus page 7.

Errors in grading: Errors—hopefully none—can be made in grading. if one feels credit is not given where credit is due, please email or see me so we can schedule a meeting to discuss the matter. I’ll be happy to help.

Laboratory Schedule: For this course, outside-of-classroom (i.e., pre- and post-laboratory work, reading the textbook and laboratory manual, homework preparation, printing resources & work that will graded) time will be needed per week as we journey through the schedule of activities (syllabus pages 9 & 10) to satisfactorily meet the student learning objectives while performing course activities safely in our laboratory setting. Our schedule of activities and due dates will change depending on student need and pace as we adjust instruction to improve student learning, success and performance in mastering the material. A course activity with its directions and guidelines, availability period and due date will be announced in Blackboard under Announcements.
**Course (Laboratory) Activities:** Multiple methods of teaching and measuring performance and understanding will be given in the form of in- and out-of-classroom course (laboratory) activities (including online). Blackboard course management software is used in this course to make announcements, coordinate dialogue and discussions, deliver various content and printable handouts and assessment PDFs to be turned in for grading, and to assess your basic knowledge of the student learning objectives linked to your syllabus—see COR link under Methods of Evaluation. A course activity with its directions and guidelines, availability period and due date will be announced in Blackboard under Announcements. Blackboard accounts will become available on the first day school starts or within 24 hours of adding our course. In general, a course (laboratory) activity will cover safeties and recent content presented, textbook and handout resources, but will also cover content and review questions from previous laboratory course activities and experiments. **Safety first.** This is extremely important. There is no substitute for coming prepared to work safely in the laboratory and there are consequences for not doing what you are supposed to do in our course (syllabus page 7 – see Do’s and Don’ts). Before coming to laboratory, complete all pre-laboratory course activities & computer-assisted instruction following the directions and guidelines announced in Blackboard under Announcements & review our General Overview steps for this course (syllabus pages 5-7: Pre-laboratory Work, Preparation, Experimentation & Record Keeping, Laboratory Reports, Formal Conclusion Write-Ups & Post-Laboratory Work). **NOTE:** The lowest laboratory course activity score “E” will be dropped (see syllabus page 10).

**Comprehensive Final-Celebration & Mini-Celebrations:** These course activities as assessments will cover content and practical work up until the day of the scheduled final-celebration; mini-celebrations are miscellaneous as needed, see syllabus page 10). These assessments will include, but is not limited to, scantron-type questions (multiple choice, matching, true/false), short essay, fill in the blank, mathematical computation, and questions on content covered in the laboratory. The goal of these assessments will be to review laboratory course activities and content, textbook and handout resources and to check your knowledge of one’s performance working safely in a laboratory setting.

**Citizens of Science:** We are here to help each other in becoming better “Citizens of Science.” Having as our intention “mastering chemistry by coming prepared, doing laboratory work and asking questions to ensure a concept is understood,” will have an impact on your performance & achievement which is used in deriving your overall grade.

**Cooperative Learning:** Be engaged. Active, not passive learning is essential in our course. Although all students are expected to have completed their laboratory activities individually, work together in study groups. Working in groups is especially recommended for preparing for our celebrations. Asking questions in our course and during visiting hours in my office is an important part in making the learning experience more participatory.

**The Learning Process and College Culture:** The learning process in this course is based on the belief that everyone has the capacity to broaden one’s knowledge and their understanding of methods of gaining knowledge in chemistry and to develop one’s abilities in critical thinking, in oral and written communication, and in mathematics. Experiencing these things and developing an awareness of college culture through the lens of other cultures will be the key to accomplishing our goals successfully. With this in mind, treat our time with respect and intention by adopting incredible elemental steps for incremental success (That’s Incredimental), and by acknowledging your productivity and your classmates with kindness and encouragement with simple positive affirmations—like “I am awesome and we have awesome chemistry”—thus keeping the motivation and momentum which develops our capacity for self-understanding as life long learners. Additional tips and strategies for improving motivation and momentum in our learning process are linked here: [http://homework.sdmesa.edu/dgergens/tips/index.html](http://homework.sdmesa.edu/dgergens/tips/index.html)
General Overview for Course (Laboratory) Activities

Pre-laboratory Work, Preparation, Experimentation & Record Keeping, Laboratory Reports, Formal Conclusion Write-Ups & Post-Laboratory Work

All course activities have pre-laboratory work to be completed before starting laboratory work and follow-up activities. Providing evidence to support your claim you are coming prepared and working safely in the laboratory with intention of mastering the content & material are very important outcomes for our course. Complete ALL pre-laboratory directions and guidelines announced in Blackboard under Announcements before coming to our laboratory. Then complete Parts 1, 2 & 3 (see below)

- For all wet labs, document Parts 1, 2 & 3 into your laboratory notebook (of your own design) having a table of contents & will be spot graded on organization, completeness & neatness at any time during our time together.
- For dry lab (see syllabus page 10), complete Part 3 to be graded on organization, completeness and neatness.

We will be logging our time learning in our laboratory; signing-in and -out using a time card. Any “saved time” in laboratory needs to be applied toward preparing for the current and next course (laboratory) activity. For example, for a three-hour activity, signing-out two hours early from laboratory gives you two hours of “saved time.”

Opportunities for bonus—incentive—points for being extremely well prepared & productive in lab will be made available & these points will count toward “Laboratory Activities” in your Overall Grade of Achievement Calculation. Please also be time-on-task—see warning about turning course activities in late (syllabus page 3).

PART 1 - Preparation & Thoughtful Intention - Complete before Coming to Class

Before your Title Page, leave a few blank pages in your laboratory notebook for any additional notes.

A. Title Page: Write your name, title of the experiment and date at the top of your Title page. Log that title and page number into a table of contents in your notebook, and continue writing items B – J below in that order.

B. Purpose & Background: Write a purpose in third person passive voice underneath the title. The purpose should be an overview of the experiment and the reason for doing it. Give appropriate background information about the experiment and its goals of achievement. It is always given in relation to the experimental work (to synthesize, to purify, to measure, to compare, etc.). Include all pertinent chemical equations and reactions where appropriate. Begin your purpose with, “In this experiment, ...”

C. Safeties: Now at the top of a new page, title it “Safeties” and write out all safety considerations.

D. Diagram your Set-Ups: After your safeties, precisely & accurately diagram (hand draw) and label all experimental set-ups. We are learning several new experiment techniques requiring special equipment. New experiment setups need to be simply diagrammed neatly, with accuracy and precision, and pieces of equipment correctly labeled.

PART 2 - In Class Experimentation - Doing Laboratory Work following the 2/3 1/3 Format

E. Procedure: At the top of a new page, divide the page vertically into 2/3 for procedures and 1/3 for observations. While in laboratory—not before—write “what you do as you are doing it” in laboratory on the left with an observations column on the right. Write with enough detail anyone could repeat the experiment. Begin your procedures by saying, "Review all safeties first." The overriding principle for your experimental procedures are as follows: "Can someone pick up my notebook, repeat the experiment without any outside information, and do a satisfactory job?" If your answer to that question is “yes,” then your notebook is properly written. This, along with your ability to accurately record observations with organization, neatness and completeness, will be used as criteria for me grading your laboratory work completed in Part 2.

F. Keep it simple in your procedures referencing your labeled diagrams you all ready prepared in Part 1. For example write, “Set up per labeled diagram, see notebook page (number)”

PART 3 - Critical Analysis of Results and Discussion

For both dry & wet lab complete the following for the course laboratory activity:

G. Data Tables, Calculations, Graphs

H. Type your answer to these final four questions:
   1) What did I do in this activity?
   2) What did I see in this activity?
   3) What did I learn in this activity?
   4) What would I like to do next

I. Reflecting on your four answers in (J), type a brief conclusion.

J. Complete the post-laboratory questions in the laboratory manual and in Assessments in Blackboard

“Think that is the opportunity that is given by this event” — Kazuo Inamori
Not sure? Please self advocate by raising your hand to gain more insight & clearer focus

- "Where do you feel most students have difficulties in understanding this material?"
- "From your experience, what are common mistakes students make in solving this type of problem?"
- "What do you find most interesting or intriguing about the material just presented to us?"
- "What questions should we be asking that we are not?"
- and most importantly "Can you please help me?" and Feedback is a Gift.

Part 4 – Typed Word Processed Purpose, Data and Analysis & Formal Conclusion (Optional)

An optional FORMAL REPORT for our E12 - Titration course activity emailed as a single PDF file will count as 
2% Bonus grade points toward “Laboratory Activities” in your Overall Grade of Achievement. ONLY a single PDF 
will be graded. Its bonus availability period and due date will be announced in Blackboard under Announcements.

This bonus activity is to include a typed purpose, data and analysis, formal conclusion. Answers to the final four 
questions, and any post-laboratory questions—see Part 5—will be placed at the end and stapled behind Part 4.

For your Formal Report, write out these headings "PURPOSE" and "CONCLUSION."

PURPOSE: Begin your report with a purpose, writing in third person, passive voice, past tense. Your purpose should 
be an overview of the experiment and the reason for doing it. It is always given in relation to the experimental work 
(to synthesize, to purify, to measure, to compare, etc.). Begin your purpose with these words, 
"In this experiment,..." This is followed by your conclusion:

CONCLUSION: Continue to write in third person, passive voice, past tense in writing your formal conclusion. 
Keep it simple, providing evidence to support your claims and results by referencing data summary tables. 
Here is a summary of key elements to be included in your conclusion:
A. Begin your conclusion by briefly restating the purpose.
B. Include the UNKNOWN sample number and the physical properties of your unknown.
C. Comment on the physical state, properties, and appearance of the unknown and final product.
D. Data Tables: Summarize all important data into tables and reference those tables in your report. Digital photos of 
laboratory notebook tables will be sufficient if your tables were prepared neatly and completely.
E. Was the activity a success? Comment on whether the data you obtained supports expected results.
F. If something did not work as expected—note it—and provide possible explanations and solutions in fixing the 
problem if the experiment were to be repeated.

http://homework.sdmesa.edu/dgergens/chem100L/samples.html

PART 5 – Final Four & Post-Laboratory Questions
A. Answer the final four questions and place these answers after your spectral interpretation in your final report: 
1) What did I do in this activity? 2) What did I see in this activity? 3) What did I learn in this activity? and 
4) What would I like to do next?
B. Answer the post-laboratory questions and place them after final four answers to the four questions.
Laboratory GLP (good laboratory practice) & Notebook DO's and DON'Ts

DO's

A. Come prepared for laboratory by completing all pre-laboratory work - Part 1 (syllabus page 5).
B. Follow all safety instructions.
C. Keep your area, balances and laboratory clean and tidy.
D. Dispose of chemicals properly.
E. Place your laboratory notes BEFORE your title and purpose in your notebook.
F. All laboratory notes, purpose & background, safeties, labeled diagrams & set-ups, experimental procedures, observations, data tables, calculations & conclusion are to be written in blue or black ink, and dated.
G. Enter procedures and experimental data directly into your laboratory notebook. It is essential that you record what you actually did and observed while you are performing the experiment, NOT BEFORE doing any lab work, and not after leaving the laboratory.
H. If an error is made, cross it out neatly, and record the correct information next to it (perhaps with a brief note explaining the change).
I. Have me initialize your laboratory notebook before leaving class at the end of the period.
J. Log your time spent in laboratory by signing-in and signing-out on your time card.

Zero Tolerance

Poorly written experimental procedures, observations, illegible & sloppy data tables and calculations will not be tolerated and will receive zero credit.

DON'Ts You will receive zero credit or a minimum of 5% overall grade reduction per violation per experiment for your work if you do any of the following:

Zero Credit

A. Contentious behavior (syllabus page 8).
B. Having an inability to follow directions and directives (syllabus page 8).
C. Missing any safety talk and/or safety demonstration.
D. Incomplete Out of Classroom Preparation & Thoughtful Intention (syllabus page 5, Part 1).
E. Not working safely in the laboratory after receiving a warning.
F. Falsifying your data in your laboratory notebook, and falsely making a claim when there is no evidence to support your claim and/or data to show otherwise.

5% Reductions per violation

G. Writing any procedure into your notebook before actually doing the work in laboratory.
H. Leaving your bench, fume hood, balances and/or overall laboratory a mess.
I. Failure to equitably share each other’s work between laboratory partners.
J. Recording data in pencil, on separate pieces of paper or erasable ink or in any color that is not blue or black.
K. Changing data by writing over it, scribbling over it, using correction fluid or otherwise rendering the original data unreadable is not permitted.
L. Recording data in a place other than your laboratory notebook.
M. Recording poorly written experimental procedures and observations.
N. Recording illegible and sloppy data and sample calculations.
O. Skipping pages in your notebook. Leave yourself plenty of space to write.
P. NOT having me initialize your laboratory notebook at the end of the period before leaving class.
Q. NOT Logging your time spent in laboratory by signing-in and signing-out on your time card.
Academic Policies & Student Services

**Academic Policies:** Please read through the most recent college catalog for details regarding the following:

**Your Behavior in Our Course and Student Code of Conduct:** You are expected to respect and obey standards of student conduct while in our course and on the campus. The student Code of Conduct, disciplinary procedure, and student due process (Policy 3100, 3100.1 and 3100.2) can be found in the current college catalog in the section Academic Information and Regulations, and at the office of the Dean of Student Affairs. Charges of misconduct and disciplinary sanctions will be imposed upon students who violate these standards of conduct or provisions of college regulations.

**Contentious behavior and the inability to follow directions and/or directives.**
Contentious behavior and the inability to follow directions and/or directives (syllabus pages 3 & 7) (i.e., Attendance/Performance Policy, Student Code of Conduct) during course activities will not be tolerated. If you show contentious behavior toward fellow students and/or me or you are unable to follow directions and/or directives during any given course activity, zero credit will be given for that course activity for contentious behavior and you will be reported to our college administrators.

**Academic Honesty Policy:** Students’ conduct, rights, and responsibilities are governed and supported by District Policy 3100. This policy will be absolutely upheld in this course and is available for review in the Vice President of Student Services and the Dean of Student Affairs offices. Any course (laboratory) activity—lab reports, assessments, homework, etc.—prepared in a manner that is in violation with Policy 3100 will be given zero credit for that course activity and you will be reported to our college administrators.

**Add, Drop and Withdrawal Policy:** It is your responsibility to add, drop and withdrawal from classes before the deadlines stated in the class schedule. If you stop attending our course and you fail to withdraw by the deadline stated in the class schedule, a final grade must be assigned to you.

**Eating, Smoking, Vaping, Drinking** is not permitted in the laboratory.

**Audio & Video Recording of My Lectures** is not permitted in our course and laboratory unless 1) you ask and you are given my permission to do so and 2) you agree to providing me with the audio and video recording along with its written transcript as email attachments by the end of the day on the day it was recorded so I might be able to share it with our learning community, and I would be happy to teach you how to transcribe files containing audio.

**Student Services Special, DSPS, Veterans Affairs & Additional Tutoring Services:**
Get the most out of college [http://homework.sdmesa.edu/dgergens/student_services.html](http://homework.sdmesa.edu/dgergens/student_services.html)

**Scholarships & Financial Support:** [http://homework.sdmesa.edu/dgergens/scholarships.html](http://homework.sdmesa.edu/dgergens/scholarships.html)

**Library Resources & Services - San Diego Mesa College LRC:**
Hours of operation are listed in Schedule of Classes; 619-388-2695. [http://www.sdmesa.edu/library/](http://www.sdmesa.edu/library/)

**Free Supervised Tutoring Help:** Go to the Mesa Tutoring Computing Center (MTC2) [http://www.sdmesa.edu/academics/academic-support-programs/tutoring/](http://www.sdmesa.edu/academics/academic-support-programs/tutoring/)

**Blackboard Help:** [http://homework.sdmesa.edu/dgergens/index2.html](http://homework.sdmesa.edu/dgergens/index2.html)

**Course Home Page:** Other resources relevant to our course can be found at the link below: 
[http://homework.sdmesa.edu/dgergens/chem100L/calendar.html](http://homework.sdmesa.edu/dgergens/chem100L/calendar.html)

This syllabus is intended to help you plan your work in our course. It is subject to change at any time by the professor be it in the best interest of our course. If you withdraw and/or are in nonattendance, you will have your materials immediately discarded unless you contact me explaining your circumstances. All other student materials will be discarded one month after their grade is posted.
Course (Laboratory) Activity Schedule - Summer 2018

- The starting and stopping dates for each experiment is printed on this calendar.

### June

<table>
<thead>
<tr>
<th>WEEK</th>
<th>Sun</th>
<th>Mon</th>
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<th>Fri</th>
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#### Experiments

- SLC Locker Check-In & Safety
- E1 Scientific Method
- E2 Elements
- E3 Mixtures
- E4 Measurement
- E5 Atomic Spectra
- E6 Chemical Periodicity
- E7 Properties of O2
- E8 Bonding
- E9 Single Replacement
- E10 H2O of Hydration
- E11 Solutions
- E12 Titrations
- REW Solutions/Gas Review
- F Final Exam Check-Out
- TBA = to be announced

### July

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<tr>
<th>WEEK</th>
<th>Sun</th>
<th>Mon</th>
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#### Dates

- Dp1 = June 26 - Last day to receive and process an add code issued by the instructor. Last day to process and pay for add codes. Deadline to drop classes with no "W" recorded.
- Dp2 = July 20 - Withdrawal deadline. No drops accepted after this date.
- PNP = July 3 - Last day to apply for Pass/No Pass grade option (Credit-No Credit)

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Aisha Bowe, co-founder & CEO of STEMBoard

Outdream yourself daily - Aisha Bowe

from Community College To NASA [click here]
Name: ________________________  

Your Summary (course activities)

- Record your scores on this grade sheet to be turned in and graded as part of your portfolio.

### Laboratory Course Activities (75%)

(see syllabus page 5, Parts 1, 2 & 3)

**bonus-incentive-points (labeled as B) on your work have been already added to your E score**

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Miscellaneous assessments as needed

Lowest E is Dropped meaning the 11 highest E's scores are totaled

Course Activities score subtotal  

Percent of Final Grade x 0.750 = 

| Laboratory Notebook can be spot graded (5%)  
| at anytime for its Organization & Contents |
| + 7 = ____ x 0.050 = ____ |

| Final (F) (20%) |
| + 200 = ____ x 0.200 = ____ |

subtotal  

| Titration Report (incentive bonus) credit (2%)  
| (see syllabus page 6, Parts 4 & 5) |
| + ____ = ____ x 0.02 = ____ |

pt total  

final grade percent
CHEMISTRY 100L LABORATORY SAFETY AGREEMENT
Summer, 2018

PRINT LAST NAME ____________________________     FIRST ____________________________
STUDENT ID# ____________________            LAB DAY _________ TIME _______

PLEASE READ THE FOLLOWING STATEMENTS AND COMPLETE THE SAFETY QUIZ ON THE REVERSE
SIDE OF THIS FORM. NO STUDENT MAY WORK IN LAB WITHOUT A SIGNED SAFETY AGREEMENT ON
FILE

1. Wear approved safety goggles or safety glasses. Contact lenses should not be worn in the lab.
2. Wear clothing that provides maximum protection. Shorts or sandals are not allowed.
3. Note the exact location of all safety equipment. Note the location of the fire extinguisher, safety shower,
   emergency telephone, emergency exits, and fire alarms.
4. All reactions using (or evolving) noxious or highly combustible chemicals must be performed in the fume hoods.
5. All spills must be reported and cleaned up immediately.
6. Eating, drinking, smoking, and chewing is forbidden in lab.
7. Cracked or broken glassware should be disposed of properly and replaced.
8. Extinguish all flames or ignition sources when using flammable, volatile chemicals.
9. Do not dump any chemical waste into the sinks or the trash. All waste must be stored in labeled containers.
10. No unsupervised lab work is permitted. An instructor must be present at all times.
11. Do not handle hot objects. Use tongs or protective gloves.
12. No unauthorized experiments are permitted. Any changes in procedures (reagents, concentrations, etc.) must be
    approved by the instructor.
13. When diluting a concentrated acid, add the acid slowly to water. Never add water to a concentrated acid. "A
    before W!"
14. Use correct procedures and precautions when inserting glass tubing into a rubber stopper.
15. All chemical containers must be labeled properly. Read all labels before using any chemicals.
16. Store all books, purses, coats etc. in designated areas.
17. Excess noise, disruptive behavior, pranks, and socializing have no place in the lab. Be considerate of others at all
    times.
18. Wash hands thoroughly before leaving the lab. Clean your portion of the desk top by washing your work area with
    a sponge. Close all water taps. Put away all equipment and lock your desk.
19. Think before acting. Use good judgment and care in the lab.
20. Immediately report all physical and chemical injuries to the instructor no matter how small the injury appears to
    be.
21. Never look into a test tube that is being heated or point it toward a neighbor.
22. Never taste a chemical unless directed to do so -- then follow directions carefully.
23. Should an acid, base, or any other chemical get on your skin or in your eyes, wash the surface immediately with
    a large volume of water. Notify the instructor.
24. Only broken glass goes into the broken glass container.
25. Hold stopper between fingers when pouring acid or base from a bottle. Do not lay the stopper on the table.

I HAVE CAREFULLY READ THE LIST OF GOOD LAB SAFETY PRACTICES AND PRECAUTIONS LISTED ABOVE AND
HAVE READ THE SAFETY INFORMATION IN THE LAB MANUAL. I HAVE COMPLETED ALL QUESTIONS ASKED ON
THE SAFETY QUIZ. I UNDERSTAND THE IMPORTANCE IN PRESERVING THE SAFETY OF ALL PERSONS IN THE
LABORATORY AND RECOGNIZE MY RESPONSIBILITY TO OBSERVE THESE PRACTICES AND PRECAUTIONS WHILE
PRESENT IN THE LAB.

SIGNATURE:_____________________________ DATE: ______________
SAFETY QUIZ

1. Can a student wear contact lenses in the lab? If not, why not?

2. Explain what the expression "STOP, DROP, AND ROLL" means?

3. Explain what actions you would take if a chemical solution splashed in your face while you are wearing safety goggles.

4. Describe the proper procedure for mixing concentrated acid and water.

5. What is your first action if you receive a minor burn?

6. What are your immediate actions if your lab partner's clothing catches fire?

7. Describe what action you would take if acid spilled on your clothing.

8. Describe what actions you would take during a moderate earthquake and a severe earthquake.

9. Describe where the following are located: fire extinguisher; eye wash; closest stairwell exits; emergency telephone; closest fire alarms.