#### CHEM 200 & 202 Syllabus - Fall 2022

#### **Contact Information:**

#### Email (for all needs): chem200@sdsu.edu

Website: <u>https://sdsuchem200.sdsu.edu/</u> (Website is meant for waitlisters and has everything except: grades and Turnitin. For the previous two items please find on Canvas when you are enrolled. The CHEM 200 Website will close after Exam 1)

#### Instructors:

Professor: Theresa Carlson, M.A. Lecture (ENS-280): 11:00 am - 11:50 am MWF Office: GMCS-213B Phone: 619-594-5481 Helproom Hours (MSLC/Zoom): 8:00 am — 10:00 am Wednesdays

Professor: Jing Gu, Ph.D. Lecture (ENS-280): 2:00 pm - 2:50 pm MWF Office: EIS-210 Phone: 619-594-6643 Helproom Hours (MSCL/Zoom): 9:00 am — 11:00 am Mondays

Lab Coordinator:

Megan Bowels, M.A. Helproom Hours (MSCL/Zoom): 10:00 am - 12:00 pm Tuesdays Contact Information: chem200@sdsu.edu

Effective Spring 2022, students who register for face-to-face classes are expected to attend as indicated in the course schedule. Faculty teaching face-to-face courses will not be required to create a new, alternative on-line class as an accommodation for any student. **Compliance with <u>CSU / SDSU vaccination and facial covering</u> <u>policies</u> is required.** 

Students with medical conditions that would present a COVID-related risk in a face-to-face instructional setting should contact the Student Ability Success Center (<u>https://sdsu.edu/sasc</u>) to begin the process of getting support. Students who do not adhere to the <u>Covid19 Student Policies</u> or the directives of their faculty will be directed to leave the classroom and will be referred to the Center for Student Rights and Responsibilities.

Do not come to campus if you do not feel well. Remain home and monitor your symptoms and seek medical attention as needed.

CHEM 200 & 202 Student Help Room will be available in the Math & Stats Learning Center (MSLC) located on the third floor of Love Library in room LL328. The MSLC will have chemistry tutors as well as TA help hours. A schedule of chemistry tutors is available through <u>https://mlc.sdsu.edu/</u>. A schedule for TA office hours at the MSLC will be made available at the end of the first week of the semester. The help hours for both Instructors and TAs will be provided on Zoom through the MSLC website. The tutors will be available in-person and via zoom in the MSLC.

I <u>highly</u> recommend that you take advantage of the tutoring services as well getting help from any of the Chem 200 & 202 TAs. These are opportunities to ask tutors and/or teaching assistants questions that arise during your studies. Any student may attend any of the Chem tutoring hours or any TA help hour and you may attend as many as you like. Take advantage of these services, they are there to help you. The weekly schedule for TA hours will be available on Canvas at the end of the first week. Again, I urge you to take advantage of these free tutorials, discussions of lecture/lab material, and OWL Assignment help.

### Textbook and Online Assignments:

Openstax Chemistry Book 2e: <u>https://openstax.org/details/books/chemistry-2e</u> (FREE to download PDF via the CHEM 200 website, as well). A hardcopy will be available in the bookstore for those who like to have a bound copy. On Canvas we will have a link to Redshelf for you to access the ebook.

OWL Online Assignments: http://www.cengage.com/owlv2/

The Lab Manual with integrated Notebook & Access Codes for Achieve is available in the bookstore. Note: You need to have the physical lab manual that you will need to bring to lab every week.

Lab Equipment will be available for purchase in the SDSU bookstore. They will have lab aprons/coats, safety glasses, nitrile gloves, and other useful lab equipment.

**Calculator** needs to be a scientific but non-graphing and non-programmable. The recommended calculator for this course is the Casio fx-300ms-plus calculator. **Graphing calculators are NOT allowed in this course!** 

Enrolled students: <u>It is absolutely crucial that you attend the first three laboratory periods</u>. Failure to do so may result in your spot in the laboratory section being given to another student. Notify the laboratory coordinator (chem200@sdsu.edu before the first week of class) if you must miss a laboratory period in the first week of the semester for a legitimate reason. You must be able to attend the laboratory section of CHEM 200 or 202 for which you are enrolled; otherwise, you must drop the course and attempt to waitlist a different section that you can attend. If you decide to drop the course, inform the laboratory coordinator by email as soon as possible so your place can be given to a waitlister.

**Waitlist:** If you are attempting to waitlist CHEM 200 or 202, you should attend every possible lab section, discussion, and lecture that will fit into your schedule. And keep track of which discussion and lab you attended. **Please go to the CHEM 200 website:** <u>sdsuchem200.sdsu.edu</u> for materials for this course. Remember, you are 100% responsible for all assignments that are due and to keep up with the work. *Waitlist students who are attempting to register for the course should email:* <u>chem200@sdsu.edu</u> with their name and *RedID info ASAP.* 

### **Online Resources:**

- <u>Canvas:</u> Canvas will be used in this course. Enrollment in Canvas is automatic if you are currently enrolled in this course. Canvas will contain information such as the course syllabus, all the experiments, handouts, lab handouts, lecture slides, and other important course information. It will be used for obtaining the syllabus, course communications, Turnitin assignments for **lab reports & prelabs**, and grade dissemination.
- <u>Chem200 Website: https://sdsuchem200.sdsu.edu/</u> will be used for waitlisters to obtain course content before they are enrolled into the course. The CHEM 200 website will close after Exam 1.
- <u>OWL:</u> will be used extensively for chapter online Problem Sets, Chapter Assessments, Exams and Pre-Assignments for Lab Experiments.
- <u>Extra Credit Lab Simulations (Achieve)</u>: are to reenforce what you learned in the lab. There will be calculations, safety questions, and topic questions to help you understand what occurred in the experiments. You will have two attempts for the quiz to better your score. *Note: The access codes can be found in the CHEM 200 & 202 Lab Manual's front page.*

USE CHROME FOR OWL and Lab Simulations!!!

### Resources To Help you Succeed:

**Supplemental Instruction (SI):** Free study sessions designed to keep you up-to-date with the course. SI Sessions are open to all students and you can attend as many sessions as you want throughout the semester. Participation is completely *voluntary* and the instructor does not know who participates. SI Sessions are led by an SI Leader, a *current student* who has recently successfully completed the course. Students who participate in SI Sessions typically earn higher final course and exam grades than students who do not participate, sometimes by a half to a full letter grade.

### Why Attend SI?

- Keep up with the class material
- Study with other students in live time (don't study alone!)
- Meet other students from the class
- Improve your grade

### CHECK OUT THE SI CALENDAR: bit.ly/chem200sicalendar

#### SI Program: <u>bit.ly/SlatSDSU</u> Meet the SI Leaders: <u>caa.sdsu.edu/supplemental-instruction/leaders</u> To get the most out of SI, attend early and often.

The Mathematics and Statistics Learning Center (MSLC): Students are encouraged to make use of The Mathematics and Statistics Learning Center (MSLC) for <u>free</u> STEM tutoring, located in the Love Library, Room 328. For a full list of courses tutored, please visit the MSLC website: <u>https://mlc.sdsu.edu/</u>.

The MSLC is supported by your student success fee. We strongly encourage you to use this wonderful, free resource. Here is how it works! Some students believe that they shouldn't need to ask for help, but research has shown that the average grade for students who attend tutoring is higher than those who don't seek such support. The TA & Instructor Help Room for select courses will also be held in the MSLC. Please check https://mlc.sdsu.edu/ for the hours and format (face-to-face or virtual) for your course.

### **General Student Learning Outcomes:**

Below is a summary of what students should be capable of upon the successful completion of this course.

- Perform calculations with the correct number of significant figures with a variety of SI units.
- Name and write a range of simple ionic and molecular formulas.
- Describe the structure of atoms and the various classes of compounds that they can form.
- · Classify the different states of matter and describe each state at the molecular level.
- Use Avogadro's number and reaction stoichiometry to calculate the amounts of reactants and products involved in chemical reactions.
- Write and balance chemical reactions.
- Describe the major classes of chemical reactions at a molecular level and perform stoichiometric calculations related to these reactions.
- Describe, manipulate, and use the ideal gas law.
- · Describe the kinetic-molecular theory of gasses and how it deviates from real gas behavior.
- Perform calculations on the exchange of heat in thermochemical processes.
- · Calculate the enthalpy of chemical reactions.
- · Describe and apply the quantum theory rules of atomic structure.
- Describe the electron configurations of many electron atoms.
- Use trends in atomic properties to compare different elements.
- · Differentiate and describe the various models of chemical bonding.
- Compare and calculate bond energies.
- Draw and identify molecular structures based on the Lewis and VESPR models.
- · Describe covalent bonding in terms of the valance bond and molecular orbital theories.
- Define the various changes of physical states for a substance and quantify the related enthalpy changes.
- Describe and differentiate the various forms of intermolecular forces.
- Describe and predict solubility in terms of intermolecular forces.
- Quantify the influence of solutes on the colligative properties of solutions.
- Quantify the enthalpy changes associated with dissolution of solutes.

### **OWL Assignments:**

Please note there are two OWL pages: OWL Lecture and OWL Labs, which separates the lecture and lab assignments. Before you begin there will be <u>four</u> Getting Started with OWL Assignments in the OWL Lecture, which you <u>must</u> complete before you attempt any other assignments in the OWL program. **If you do not see the assignments click on Show All Assignments.** Attempting to use OWL without understanding how the program works can lead to issues later on. Please take notes while you are doing these four assignments since the topics will be covered later.

**IMPORTANT REGARDING THE OWL DEADLINES:** The OWL program does not allow me to use the :59 so I am giving you one extra minute; my other option was :55 and you lose 4 minutes. So just remind yourself it's due on "Day of the Week" at 11:59 pm so you don't confuse yourself. We will post an announcement reminding you of the deadlines, the deadlines will be in the lecture slides, on the Canvas Calendar, as well as on the OWL program.

- ◆Optional: General Chemistry Review (OWL Lecture) is an assessment review on key chemistry concepts and essential skills to help you determine if you are ready for Chem 200. There will be 34 questions in the quiz that will assess your knowledge on chemistry concepts and essential skills in chemistry.
  - This assignment (the graded quiz) can replace Chapter 1 and 2 Problem Sets; if you choose to do it. You have unlimited tries to receive a perfect score and there will be no 85% adjustment if you choose to do this assignment over the Chapter 1 and 2 Problem Sets.
- •Optional: Math Review (OWL Lecture) is to help refresh your memory and your knowledge on basic math skills and algebra skills you need in this course.
- Lab Safety Quiz (OWL Labs): The lab safety quiz must be completed with a grade of 60% or higher before you work in the laboratory. If you fail to achieve a 60% or higher on the online quiz, the lab coordinator will give you a paper quiz. Once you pass the paper lab safety quiz you will be allowed to attend lab. <u>Note: The lab safety quiz will need to be completed by Friday, September 9th at 11:59 pm. The paper quiz will not replace your original lab safety quiz grade.</u> Worth 10 points out of 15 for the Lab Safety portion of the grade.
  - ◆EH&S REQUIRED Lab Safety Form (Canvas): This course requires the use and handling of hazardous materials. You must complete the Environmental Health and Safety module and survey in our Canvas course by Friday, September 9th at 11:59 pm. If you do not complete the form by the deadline you will not be allowed to enter the labs until it has been completed. Worth 5 points out of 15 for the Lab Safety portion of the grade.
- Lab Pre-Assignment (OWL Labs): is to help you prepare yourself for the lab you will be doing. There will be calculations, safety questions, and topic questions to help you understand what you are doing in the lab. This assignment must be completed before coming to lab and will be due on Sunday at 11:59 PM the week of the experiment.
- Chapter Assessments (OWL Lecture) are hard deadlines and extensions will not be granted. You will have two attempts at the chapter assessment. The Chapter Assessments questions are to assess your learning of that Chapter and to help prepare you for the exam. Do not wait until the last minute to complete the prep.
- +Chapter Problem Set (OWL Lecture) policies:
  - There will be a chapter problem set from each of the 11 chapters covered in the text. Work on the
    problems several days before it's due so you have time to go to the help room and ask for
    more help. Never wait until the last day to work on the problem set; otherwise you will be
    rushing through the assignment and instead of learning how to break down problems and theories
    to better equip you for the exams.
  - Full points can be obtained for each chapter's problem set by <u>scoring above 85% on the problems</u> for that chapter.
    - A score 74% = (74% ÷ 85%)×10 = 8.7 points
  - It is in your best interest to complete all the problem sets to ensure that you are fully prepared for the exams.

 The adjusted points will be calculated throughout the semester. Please watch your email for important announcements regarding the uploads. Errors occur due to incorrect RedID, multiple OWL accounts, and/or your work is in the wrong section.

Note: We highly recommend everyone buys a composition book in order to work on the problem sets, keep good notes and make your studying more efficient. Use the time spent on the Problem Sets as your study time and start creating good habits!

#### Other Assignments:

- •Lab Reports and Pre-labs, not the lab pre-assignment (Canvas): will need to be submitted to <u>Turnitin in</u> <u>Canvas</u> for you to receive a grade for your prelab and lab report. Failure to send your prelab and lab report <u>before</u> your prelab and lab report is due will be an automatic zero. Prelabs and lab reports that are plagiarized will be an automatic zero and will be reported. Make sure you turn in the proper prelab and lab report into the correct Turnitin folder in Canvas. Failure to do so will result in a point penalty at the discretion of the lab coordinator. If you have issues with submitting your lab report and/or prelab, email <u>chem200@sdsu.edu</u> and your lab TA with a PDF file of the report BEFORE the deadline. One minute late assignments is still a late assignment and will receive a zero. Prelabs are due on Sundays at 11:59 pm <u>before</u> the lab period and the lab reports are due Sunday at 11:59 pm <u>after</u> the lab period. There are no extensions on the assignments.
- Lab Simulations (Achieve) is to help you better understand the experiment you have done in person or would have done if we go online for the labs. There will be calculations, safety questions, and topic questions regarding the experiments. You will have two attempts of the multiple choice quiz and must be completed on Sunday at 11:59 PM after the experiment has been completed.
- ◆ Lecture Participation (In-Person Lecture/Canvas): In every lecture there will be several embedded QR Codes that you will need to register and answer the questions during lecture. These questions are too test if you understood the material in the lecture. Before the exams, we will post the amount of points you have accumulated so far for lecture participation. You will be able to miss 4 lectures without penalty.
- Discussion (Chem 200 only) is an extra lecture session to go over concepts, calculations, and theory from the lectures. You will need to print the discussion worksheet (provided on the chem 200 website) and try several of the problems by yourself before discussion. The experienced TA will help you with your questions and/or have you ask other students to help bring more of a discussion of concepts that are not being understood. Discussion is worth 10 points for participation and 5 points for a Discussion Wrap-Up, for a total of 15 points. The Discussion Wrap-Up is a couple of questions based on the topics of that week's discussion worksheet. Some discussion sessions will be a review session for the upcoming exam using an app called Kahoot. Kahoot is a game based learning platform: to play, learn, and have fun in a team setting answering questions on the theory and calculations of the upcoming exam.

<u>Note:</u> Your individual grades for each course component will be posted on Canvas. Grades that have been completed from OWL and Achieve, will be posted the week of your exam dates. You will have a week to check your grades and to email the coordinator of any issues with your OWL and/or Achieve grades (e.g. they are not showing up). Failure in checking your grades by the deadline will result in a 10-point penalty within a week after the check-up deadline, <u>afterwards the grades will be left as zeros.</u> There will be two announcements on Canvas to remind you to check your grades.

### Grading:

Your letter grade will be determined by your individual points total for the course. **There will be no curving of the course grades**. Below is a tentative grade range breakdown for each letter grade based on the percentage of total points. The instructors reserve the right to universally modify this grade scale prior to assigning final letter grades.

| Letter | Percentage | Letter | Percentage |
|--------|------------|--------|------------|
| Α      | > 90%      | C+     | 68-72%     |
| A-     | 85-90%     | С      | 63-68%     |
| B+     | 81-85%     | C-     | 59-63%     |
| В      | 76-81%     | D      | 53-59%     |
| В-     | 72-76%     | F      | <53%       |

Note: Please check your grade frequently, especially after each exam. Email <u>chem200@sdsu.edu</u> if you think there is a calculation mistake. At the end of the semester, when grades are finalized, email only if there is a calculation mistake.

| CHEM 200 Grade Scheme          |                                 |                |              |       |            |
|--------------------------------|---------------------------------|----------------|--------------|-------|------------|
| Item                           | Submission                      | Quantity       | Value (each) | Total | Percentage |
| Lab Safety Quiz & EH&S<br>Form | OWL Lab &<br>Canvas             | 1              | 15           | 15    | 0,8 %      |
| Pre-Assignment Labs            | OWL Lab                         | 10             | 5            | 50    | 2,7 %      |
| Chapter Problem Set            | OWL Lecture                     | 11             | 10           | 110   | 6,0 %      |
| Chapter Assessment             | OWL Lecture                     | 11             | 15           | 165   | 9,1 %      |
| Exams                          | OWL Lecture                     | 4              | 225          | 900   | 49,5 %     |
| Lab Reports                    | Canvas/<br>TurnltIn             | Best 10 of 11  | 20           | 200   | 11,0 %     |
| Lab Practical                  | OWL Lecture &<br>In-Person      | 1              | 80           | 80    | 4,4 %      |
| Notebook Check                 | Paper                           | 1              | 20           | 20    | 1,1 %      |
| TA Seminar Report              | Paper                           | 1              | 30           | 30    | 1,6 %      |
| Discussion                     | Paper                           | Best 14 of 15  | 15           | 210   | 11,5 %     |
| Lecture Participation          | In-Person<br>Lecture/<br>Canvas | Best 40 out 44 | 1            | 40    | 2,2 %      |
|                                |                                 |                | Total        | 1820  | 100,0 %    |

|                                | CHEM 202 Grade Scheme           |                |              |       |            |
|--------------------------------|---------------------------------|----------------|--------------|-------|------------|
| Item                           | Submission                      | Quantity       | Value (each) | Total | Percentage |
| Lab Safety Quiz & EH&S<br>Form | OWL Lab &<br>Canvas             | 1              | 15           | 15    | 0,9 %      |
| Pre-Assignment Labs            | OWL Lab                         | 10             | 5            | 50    | 3,1 %      |
| Chapter Problem Set            | OWL Lecture                     | 11             | 10           | 110   | 6,8 %      |
| Chapter Assessment             | OWL Lecture                     | 11             | 15           | 165   | 10,2 %     |
| Exams                          | OWL Lecture                     | 4              | 225          | 900   | 55,9 %     |
| Lab Reports                    | Canvas/<br>TurnItIn             | Best 10 of 11  | 20           | 200   | 12,4 %     |
| Lab Practical                  | OWL Lecture &<br>In-Person      | 1              | 80           | 80    | 5,0 %      |
| Notebook Check                 | Paper                           | 1              | 20           | 20    | 1,2 %      |
| TA Seminar Report              | Paper                           | 1              | 30           | 30    | 1,9 %      |
| Lecture Participation          | In-Person<br>Lecture/<br>Canvas | Best 40 out 44 | 1            | 40    | 2,5 %      |
|                                |                                 |                | Total        | 1610  | 100,0 %    |

| Course Schedule |              |              |   |  |
|-----------------|--------------|--------------|---|--|
| Lecture<br>#    | Date         | Text Chapter | Торіс                                   |  |
| 1               | Aug 22, 2022 | Welcome      | Syllabus, Class and Lab Overview        |  |
| 2               | Aug 24, 2022 | Chapter 1    | Essential Ideas                         |  |
| 3               | Aug 26, 2022 | Chapter 2    | Atoms, Molecules, and lons              |  |
| 4               | Aug 29, 2022 | Chapter 2    | Atoms, Molecules, and lons              |  |
| 5               | Aug 31, 2022 | Chapter 3    | Composition of Substances and Solutions |  |
| 6               | Sep 2, 2022  | Chapter 3    | Composition of Substances and Solutions |  |
| -               | Sep 5, 2022  | Holiday      | No Class                                |  |
| 7               | Sep 7, 2022  | Chapter 4    | Stoichiometry of Chemical Reactions     |  |
| 8               | Sep 9, 2022  | Chapter 4    | Stoichiometry of Chemical Reactions     |  |
| 9               | Sep 12, 2022 | Chapter 4    | Stoichiometry of Chemical Reactions     |  |
| 10              | Sep 14, 2022 | Chapter 4    | Stoichiometry of Chemical Reactions     |  |
| 11              | Sep 16, 2022 | Chapter 1–4  | Review for Exam 1                       |  |

| Course Schedule |              |                   |   |  |
|-----------------|--------------|-------------------|---|--|
| Lecture<br>#    | Date         | Text Chapter      | Торіс   |  |
| 12              | Sep 19, 2022 | Chapter 5         | Thermochemistry   |  |
| 13              | Sep 21, 2022 | Chapter 5         | Thermochemistry   |  |
| 14              | Sep 23, 2022 | Chapter 5         | Thermochemistry   |  |
| 15              | Sep 26, 2022 | Chapter 5         | Thermochemistry   |  |
| 16              | Sep 28, 2022 | Chapter 5         | Thermochemistry   |  |
| 17              | Sep 30, 2022 | Chapter 5         | Thermochemistry   |  |
| 18              | Oct 3, 2022  | Chapter 6         | Electronic Structure and Periodic Properties of<br>Elements |  |
| 19              | Oct 5, 2022  | Chapter 6         | Electronic Structure and Periodic Properties of<br>Elements |  |
| 20              | Oct 7, 2022  | Chapter 6         | Electronic Structure and Periodic Properties of<br>Elements |  |
| 21              | Oct 10, 2022 | Chapter 6         | Electronic Structure and Periodic Properties of<br>Elements |  |
| 22              | Oct 12, 2022 | Chapter 6         | Electronic Structure and Periodic Properties of<br>Elements |  |
| 23              | Oct 14, 2022 | Chapter 5-6       | Review for Exam 2   |  |
| 24              | Oct 17, 2022 | Chapter 7         | Chemical Bonding and Molecular Geometry                     |  |
| 25              | Oct 19, 2022 | Chapter 7         | Chemical Bonding and Molecular Geometry                     |  |
| 26              | Oct 21, 2022 | Chapter 7         | Chemical Bonding and Molecular Geometry                     |  |
| 27              | Oct 24, 2022 | Chapter 7         | Chemical Bonding and Molecular Geometry                     |  |
| 28              | Oct 26, 2022 | Chapter 7         | Chemical Bonding and Molecular Geometry                     |  |
| 29              | Oct 28, 2022 | Chapter 8         | Advanced Theories of Covalent Bonding                       |  |
| 30              | Oct 31, 2022 | Chapter 8         | Advanced Theories of Covalent Bonding                       |  |
| 31              | Nov 2, 2022  | Chapter 8         | Advanced Theories of Covalent Bonding                       |  |
| 32              | Nov 4, 2022  | Chapter 8         | Advanced Theories of Covalent Bonding                       |  |
| 31              | Nov 7, 2022  | Chapter 8         | Advanced Theories of Covalent Bonding                       |  |
| 32              | Nov 9, 2022  | Chapter 9         | Gases   |  |
| 33              | Nov 11, 2022 | Holiday           | No Class  |  |
| 34              | Nov 14, 2022 | Chapter 9         | Gases   |  |
| 35              | Nov 16, 2022 | Chapter 9         | Gases   |  |
| 36              | Nov 18, 2022 | Chapter 79.1- 9.3 | Review for Exam 3   |  |

| Course Schedule |              |              |                        |  |
|-----------------|--------------|--------------|------------------------|--|
| Lecture<br>#    | Date         | Text Chapter | Торіс                  |  |
| 37              | Nov 21, 2022 | Chapter 9    | Gases                  |  |
| _               | Nov 23, 2022 | Holiday      | No Class               |  |
| _               | Nov 25, 2022 | Holiday      | No Class               |  |
| 38              | Nov 28, 2022 | Chapter 10   | Liquids and Solids     |  |
| 39              | Nov 30, 2022 | Chapter 10   | Liquids and Solids     |  |
| 40              | Dec 2, 2022  | Chapter 10   | Liquids and Solids     |  |
| 41              | Dec 5, 2022  | Chapter 11   | Solutions and Colloids |  |
| 42              | Dec 7, 2022  | Chapter 11   | Solutions and Colloids |  |
| 43              | Dec 9, 2022  | Chapter 11   | Solutions and Colloids |  |
| 44              | Dec 12, 2022 | Chapter 1–11 | Review for Final       |  |

| Exam Schedule | Exam Schedule (Administered Online in OWL Lecture)                |  |  |
|---------------|---|--|--|
|               | Date  |  |  |
| Exam 1        | Friday, September 16th 3:00 PM — Saturday, September 17th 3:00 PM |  |  |
| Exam 2        | Friday, October 14th 3:00 PM — Saturday, October 15th 3:00 PM     |  |  |
| Exam 3        | Friday, November 16h 3:00 PM — Saturday, November 17th 3:00 PM    |  |  |
| Final         | Friday, December 16th 3:00 PM — Saturday, December 17th 3:00 PM   |  |  |

♦ Exams will be conducted in OWL. You will have 24 hrs to complete the exam starting at 3 PM on the exam date. Once the exam is started you have 2 hrs to complete it.

| Lab Schedule  |                 |             |  |
|---|-----------------|-------------|--|
| Experiment/Activity   | Monday Lab      | Tuesday Lab |  |
| Introduction to Labs & Lab Safety (In-<br>Person)   | August 22, 2022 | Aug 23, 22  |  |
| How to Write a Lab Notebook & Pre-<br>lab Worksheets (In-Person)  | Aug 29, 22      | Aug 30, 22  |  |
| Holiday — No labs   | Sep 5, 22       | Sep 6, 22   |  |
| Use of Volumetric Equipment<br>Experiment (In-Person)   | Sep 12, 22      | Sep 13, 22  |  |
| Check-In & An Introduction to<br>Qualitative Analysis Experiment (In-<br>Person)                                      | Sep 19, 22      | Sep 20, 22  |  |
| Limiting Reagent of Solutions (In-<br>Person)   | Sep 26, 22      | Sep 27, 22  |  |
| Standardization of an Aqueous NaOH Solution Experiment (In-Person)  | Oct 3, 22       | Oct 4, 22   |  |
| Molar Mass of Citric Acid Experiment (5B) (In-Person)   | Oct 10, 22      | Oct 11, 22  |  |
| Calorimetry Part 1: Specific Heat<br>Capacity Experiment (In-Person)  | Oct 17, 22      | Oct 18, 22  |  |
| Calorimetry Part 2: Enthalpy of<br>Reaction Experiment & Heat Capacity<br>of a Calorimeter Experiment (In-<br>Person) | Oct 24, 22      | Oct 25, 22  |  |
| Analysis of an Aluminum-Zinc Alloy<br>Experiment (In-Person)  | Oct 31, 22      | Nov 1, 22   |  |
| Atomic Emission Spectra Experiment  | Nov 7, 22       | Nov 8, 22   |  |
| Freezing Point of Solutions<br>Experiment (In-Person)   | Nov 14, 22      | Nov 15, 22  |  |
| No Labs   | Nov 21, 22      | Nov 22, 22  |  |
| TA Seminar & Check-Out* (In-Person)   | Nov 28, 22      | Nov 29, 22  |  |
| Lab Practical (In-Person)   | Dec 5, 22       | Dec 6, 22   |  |

Note about the Lab Practical: The lab practical will be broken up into three portions:

a. Lab Practical: Simulations (online 36 hour window): Will test you on experiments via simulations with some math problems as well. There will be no time limit for the Simulation portion of the experiment BUT you need to do it in one sitting. There is no save and exit (yes the button is there but it will submit your grade as is). Worth 10 points

b. Lab Practical: Problem Sets (online 36 hour window): Will test you on experimental problems similar to what you saw in the experiments via hands-on or data analysis. This has a set time limit of 80 minutes and will need to be completed in one sitting. Worth 30 points

c. Lab Practical: In-person Experiment (during your scheduled lab period): During your scheduled lab period you will do a single mini-experiment. Please arrive 10 minutes early and have your PPE on 8 minutes before you come into the lab. You will have the entire lab period to complete the In-person portion of the lab practical. Please note this shouldn't take you more than 80 minutes to complete. Worth 40 points

#### **Online Assignment Policy:**

The deadlines for the online assignments, including pre-labs, OWL Assignments, and other assignments are hard deadlines and extensions will not be granted. All assignments will be scheduled with sufficient time to allow you to complete the assignment in advance of the "last minute". *Consequently, you are solely responsible for any failures to complete the assignment by the scheduled time.* Problems such as lack of internet service, OWL site problems, or dogs eating WiFi antennas will not be acceptable reasons for not completing the assignments. *You are encouraged to complete the assignments well before the deadlines to avoid potential technological obstacles.* 

If you have any personal technology issues the Library Computing Hub provides computing and technical support for students.

In the case of an extended system-wide failure the instructors will be notified by the site operator and steps will be taken to accommodate any problems that arise. For all technical difficulties or errors that arise with the **OWL** system **please contact Cengage technical support staff directly by phone and email.** For **Achieve** system **please contact them** as well. The instructors, lab coordinator, and TAs will be unable to help you resolve anything but the most basic (is it plugged in?) technical problems.

**Technology:** Provided in your Canvas shell will be a video on the homepage about the layout of the course and this is where **you should start**. It is highly recommended you watch the video and take notes so you won't be lost in this course.

**In-person Labs During COVID-19 Pandemic:** Please follow all guiding signs and TA instructions while in the lab to maintain proper safety protocols.

<u>Precautions During COVID-19</u>: Face masks must cover mouth and be worn to enter the lab, and at all times while in the lab. Anyone who doesn't follow this policy will be asked to leave the lab immediately. When entering the lab, students' temperatures will be checked, and everyone will need to use hand sanitizer before entering the lab and leaving the lab (this will be provided in the lab). There will be a set pathway all will adhere too. One is an entrance, and one is an exit. There is no entering through an exit or exiting an entrance. You will also need to show your green medallion when entering the lab.

#### **Attendance Policy:**

For Exams: Attendance for all exams is required, including the lab practical exam. Proper documentation is required to avoid receiving a grade of zero on a missed course component two weeks into the semester (by 09/02/2022). There will be no makeup exams outside of extenuating circumstances (*e.g. illness during the 24 hr exam period*). It is your responsibility to ensure that you will be available for online exams with proper internet accessibility and bandwidth.

Excused absences for exams will only be awarded in the case of a legitimate reasons (illness, scheduled academic/athletic events, court appearances, etc.) as determined by the instructor and will require support documentation. If you are on a sports team, we will need to have your travel letter no later than **09/02/2022**.

# Only under exceptional circumstances, as determined by the instructor, will a makeup exam be granted for the final exam.

**For lectures:** Regular lecture attendance is **<u>strongly recommended</u>**. Lectures will have If you do have to miss class, you should go over the posted lecture slides and recorded lectures that can be found on Canvas and the chem200 website.

**For labs and discussion:** Attendance in **all** laboratory meetings and discussion is **REQUIRED.** All lab and discussion work, during the semester, must be done in the scheduled period. If you are late by 10 minutes, for your lab or discussion period, the lab/discussion TA will deduct 5 points from your grade; after 20 minutes you will no longer receive credit for the lab period or discussion participation. Under no circumstances will students be allowed to make up lab experiments and/or discussions. Note that CHEM 202 students are required to attend only the laboratory and not the discussion section each week.

# Note: If you miss one lab and/or discussion the lab and/or discussion will be the dropped assignment. If you have an excused absence that <u>extends beyond one week</u> please email the lab coordinator ASAP.

#### Medical Absences:

If you must miss class due to illness, injury or emergency. Please note:

- University policy instructs students to contact their professor/instructor/coach in the event they need to miss class due to an illness, injury, or emergency. All decisions about the impact of an absence, as well as any arrangements for making up work, rest with the instructors. Please see the above Attendance policy.
- ♦ If a student misses class because of COVID-19, either because they have been diagnosed and are quarantined or are required to isolate and would like to request a class excuse letter, the student should send an email to vpsafrontdesk@sdsu.edu to notify the university. Student Affairs and Campus Diversity will initiate the process for absent letters to be sent to course instructors, Assistant Deans, and the Provost. Medical documentation may be required prior to the letter being issued.
- ◆ <u>Student Health Services</u> (SHS) does not provide medical excuses for short-term absences due to illness or injury. When a medical-related absence persists beyond five days, SHS will work with students to provide appropriate documentation.
- ♦ When a student is hospitalized or has a serious, ongoing illness or injury, SHS will, at the student's request and with the student's consent, communicate with the student's instructors via the Vice President for Student Affairs and Campus Diversity and may communicate with the student's Assistant Dean and/or the <u>Student Ability Success Center</u>.

<u>Other Absences</u>: If you plan to be absent for a religious observance or holiday, notify the coordinator at <u>chem200@sdsu.edu</u> no later than 09/02/2022.

**Test accommodations:** If you are a student with a disability and are in need of accommodations for this class, please contact Student Ability Success Center at sascinfo@sdsu.edu (or go to sdsu.edu/sasc) as soon as possible. Please know accommodations are not retroactive, and I cannot provide accommodations based upon disability until I have received an accommodation letter from Student Ability Success Center. SASC registration and accommodation approvals may take up to 10-14 business days, so please plan accordingly.

**Policy on Cheating/Plagiarism:** There is a zero tolerance policy regarding plagiarism in this course. Any instances of cheating or plagiarism identified by the TA, lab coordinator, or the instructors, will result in a meeting between the instructor and student(s) following which the instance and documentation of plagiarism will be reported to the Academic Senate as well as the student <u>receiving a grade of F for the course</u>. It is your responsibility to know what constitutes cheating and plagiarism. For example, turning in a lab report for a lab that you have not performed, or the results of a lab that you had completed in a prior semester (self-plagiarism), both constitute cheating and plagiarism and will be reported - *all students must perform their own analyses in the labs*.

**Preferred Names & Pronouns:** Any student who wishes to be addressed by a name other than what is presented in Canvas is encouraged to contact the professor via email with the name you wish to use in this course. Similarly, if you have preferred pronouns that you wish to be addressed by please contact your professor. The professor will communicate your desires to the TAs and all instructional staff will gladly honor your request.

**Email:** Students are provided with an SDSU Gmail account, and this <u>SDSU email address</u> will be used for all communications. Per University Senate policy, students are responsible for checking their official university email once per day during the academic term. For more information, please see <u>Student Official Email Address</u> <u>Use Policy here</u>.

**Finding Help on Campus:** Need help finding help -- an advisor, tutoring, counselling, or emergency economic assistance? The <u>SDSU Student Success Help Desk</u> is here for you. Student assistants are available via Zoom Monday through Friday, 9:00 AM to 4:30 PM to help you find the office or service that can best assist with your particular questions or concerns.

- CAL Student Success Center: https://cal.sdsu.edu/student-resources/student-success
- College of Education Student Success Center: <a href="https://education.sdsu.edu/oss">https://education.sdsu.edu/oss</a>
- Center for Student Success in Engineering: https://csse.sdsu.edu/
- CoS Student Success Center: <u>https://cossuccess.sdsu.edu/</u>

- · FSB Student Success Center: https://business.sdsu.edu/undergrad/advising
- HHS Adivisors: <u>https://chhs.sdsu.edu/student-resources/advising/</u>
- IVC Student Success and Retention: <u>https://ivcampus.sdsu.edu/student\_affairs/retention</u>
- PSFA Advisors: <a href="https://psfa.sdsu.edu/resources/student\_advisors">https://psfa.sdsu.edu/resources/student\_advisors</a>

Sexual violence / Title IX mandated reporting: As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I am a mandated reporter in my role as an SDSU employee. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep the information you share private to the greatest extent possible. However, I am required to share information regarding sexual violence on SDSU's campus with the Title IX coordinator, Jessica Rentto 619-594-6017. She (or her designee) will contact you to let you know about accommodations and support services at SDSU and possibilities for holding accountable the person who harmed you. Know that you will not be forced to share information you do not wish to disclose and your level of involvement will be your choice. If you do not want the Title IX Officer notified, instead of disclosing this information to your instructor, you can speak confidentially with the following people on campus and in the community. They can connect you with support services and discuss options for pursuing a University or criminal investigation. Sexual Violence Victim Advocate 619-594-0210 or Counseling and Psychological Services 619-594-5220, psycserv@sdsu.edu. For more information regarding your university rights and options as a survivor of sexual misconduct or sexual violence, please visit titleix.sdsu.edu or sdsutalks.sdsu.edu.

**SDSU Economic Crisis Response Team:** If you or a friend are experiencing food or housing insecurity, technology concerns, or any unforeseen financial crisis, it is easy to get help! Visit <u>sdsu.edu/ecrt</u> for more information or to submit a request for assistance.

SDSU's Economic Crisis Response Team (ECRT) aims to bridge the gap in resources for students experiencing immediate food, housing, or unforeseen financial crises that impacts student success. Using a holistic approach to well-being, ECRT supports students through crisis by leveraging a campus-wide collaboration that utilizes on and off-campus partnerships and provides direct referrals based on each student's unique circumstances. ECRT empowers students to identify and access long term, sustainable solutions in an effort to successfully graduate from SDSU. Within 24 to 72 hours of submitting a referral, students are contacted by the ECRT Coordinator and are quickly connected to the appropriate resources and services.

For students who need assistance accessing technology for their classes, visit our ECRT website (<u>sdsu.edu/ecrt</u>) to be connected with the SDSU library's technology checkout program. The technology checkout program is available to both SDSU and Imperial Valley students.

Help control the COVID-19 pandemic: Addressing the COVID-19 pandemic is a shared responsibility. Each of us has a role to play in keeping our learning environments and campus as safe as possible. To that effect, it is critical students are aware that SDSU policy requires the wearing of face coverings by faculty, staff, and students on campus except if you are alone in a private office or eating outside while maintaining physical distancing of at least 6 feet. All individuals on campus must also practice physical distancing, stay home if ill, care for common work spaces if you use them, and report if you receive a positive COVID-19 test. Instructions for caring for instructional spaces will be posted in each lab, clinic, or classroom; supplies will be available. Individuals are required to provide their own facial coverings. If students need assistance purchasing facial coverings, please contact the Economic Crisis Response Team.

**CHEM 200 Students:** The lab is a face-to-face class. Students shall be required to bring or purchase PPE as part of their class supplies. Students who need financial assistance may contact the Economic Crisis Response Team for support. The modality of this course is subject to change in connection with evolving public health conditions and recommendations. Students with medical conditions which would present a COVID-related risk and a face-to-face instructional setting should contact the Student Ability Success Center (https://sdsu.edu/sasc) to begin the process of getting support. Students who do not adhere to the Covid19 Student Policies, and do not comply with the directives of their faculty, will be directed to leave the classroom, and will be referred to the Center for Student Rights and Responsibilities. All SDSU community members are encouraged to make a commitment to health and safety, please consider signing the SDSU Health Commitment. For additional COVID-19 information, visit the university's COVID website.

Land Acknowledgement: For millennia, the Kumeyaay people have been a part of this land. This land has nourished, healed, protected and embraced them for many generations in a relationship of balance and harmony. As members of the San Diego State University community we acknowledge this legacy. We promote this balance and harmony. We find inspiration from this land; the land of the Kumeyaay. As students, faculty, staff and alumni of San Diego State University we acknowledge this legacy from the Kumeyaay. We promote this balance in life as we pursue our goals of knowledge and understanding. We find inspiration in the Kumeyaay spirit to open our minds and hearts. It is the legacy of the red and black. It is the land of the Kumeyaay.

'eyay e'haan My heart is good.

## Am I Ready For CHEM 200:

# ASSUME THIS CLASS WILL REQUIRE A MINIMUM OF 15 HOURS OF YOUR TIME PER WEEK TO COMPLETE.

The prerequisites for CHEM 200 are one year of high school chemistry, two years of algebra, and a passing score on the Placement Test, or a passing grade (a C or higher) in Chem 100. Chemistry 200 is a demanding, 5-unit course which requires an enormous amount of time and your commitment to work hard! (Please do NOT take this course unless you are prepared to commit the necessary time and hard work.) It is advisable that you make Chemistry 200 the focus of your semester and that you do NOT overburden yourself with an unmanageable course load while taking this course. YOUR success is our success. and we want you to succeed in this course. YOUR success requires a large time commitment and hard work - please do NOT take this course unless you are willing to allow sufficient time to study, attend ALL lectures, and attend ALL labs with preparation in advance. Writing good laboratory reports also requires a lot of time and preparation prior to lab. You will enjoy your semester in Chemistry 200 - and you will benefit in the sciences so much more from all that you learn - if you allow yourself the time necessary to work hard and succeed. PLEASE ALLOW ADEQUATE TIME IF YOU TAKE THIS COURSE!

### This syllabus and schedule are subject to change if the instructor deems its necessary.