



Syllabus for CHEM 100

Course Information

Semester & Year: spring, 2022

Course ID & Section #: CHEM-100-V2809

Instructor's name: Paul Farnham

Course units: 4

Instructor Contact Information

Office location or *Online: Online

Office hours: Th 8-9 PM via techZoom meeting

Phone number: -

Email address: Use Canvas Inbox or paul-farnham@redwoods.edu

Catalog Description

A brief introduction to the principles of chemistry and the application of mathematics to chemistry. Chem 100 is intended to prepare students for General Chemistry (CHEM 1A) who did not take high school chemistry or whose prior chemistry is outdated.

Course Student Learning Outcomes (*from course outline of record*)

1. Apply the problem-solving method of dimensional analysis to unit conversions, traditional proportion problems, percentage problems and in the development of derived units.
2. Evaluate chemical principles to quantitatively evaluate chemical reactions.
3. Apply chemical principles to qualitatively evaluate chemical reactions.

Prerequisites/co-requisites/ recommended preparation

[If applicable]

Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or [Disability Services and Programs for Students](#) (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1st floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

During COVID19—DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

****Other verbiage you can include if you want:***

Student Support

Good information and clear communication about your needs will help you be successful. Please let your instructor know about any specific challenges or technology limitations that might affect your participation in class. College of the Redwoods wants every student to be successful.

Evaluation & Grading Policy

COURSE GRADING

The module practice problems – - 100 pts (20 % of total grade)

The 3 tests - 300 points, 100 points each, (60% of total course)

The final exam - 100 points, (20% of the total course grade)

Admissions deadlines & enrollment policies

Spring 2021 Dates

- *Classes begin: 1/16/21*
- *MLK Jr. Birthday (all campuses closed): 1/18/21*
- *Last day to add a class: 1/22/21*
- *Last day to drop without a W and receive a refund: 1/29/21*
- *Census date: 2/01/21 or 20% into class duration*
- *Last day to petition to file P/NP option: 2/12/21*
- *Lincoln's Birthday (all campuses closed): 2/12/21*
- *President's Day (all campuses closed): 2/15/21*
- *Last day to petition to graduate or apply for certificate: 3/04/21*
- *Spring Break (no classes): 3/15/21 - 3/20/21*
- *Last day for student-initiated W (no refund): 4/02/21*
- *Last day for faculty-initiated W (no refund): 4/02/21*
- *Final examinations: 5/08/21 - 5/14/21*
- *Semester ends: 5/14/21*
- *Grades available for transcript release: approximately 5/31/21*

Academic dishonesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct ([AP 5500](#)) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [College Catalog](#) and on the [College of the Redwoods website](#).

Disruptive behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process, a disruptive student may be temporarily removed from class. In addition, the student may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct ([AP 5500](#)) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [College Catalog](#) and on the [College of the Redwoods website](#).

Inclusive Language in the Classroom

College of the Redwoods aspires to create a learning environment in which all people feel comfortable in contributing their perspectives to classroom discussions. It therefore encourages instructors and students to use language that is inclusive and respectful.

Setting Your Preferred Name in Canvas

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact [Admissions & Records](#) to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. This does not change your legal name in our records. See the [Student Information Update form](#).

Canvas Information

If using Canvas, include navigation instructions, tech support information, what Canvas is used for, and your expectation for how regularly students should check Canvas for your class.

Log into Canvas at <https://redwoods.instructure.com>

Password is your 8 digit birth date

For tech help, email its@redwoods.edu or call 707-476-4160

[Canvas Help for students: https://www.redwoods.edu/online/Home/Student-Resources/Canvas-Resources](#)

Canvas online orientation workshop: <https://redwoods.instructure.com/courses/6781>

Community College Student Health and Wellness

Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges [Health & Wellness website](#).

[Wellness Central](#) is a free online health and wellness resource that is available 24/7 in your space at your pace.

Students seeking to request a counseling appointment for academic advising or general counseling can email counseling@redwoods.edu.

Emergency procedures / Everbridge

College of the Redwoods has implemented an emergency alert system called Everbridge. In the event of an emergency on campus you will receive an alert through your personal email and/or phones. Registration is not necessary in order to receive emergency alerts. Check to make sure your contact information is up-to-date by logging into WebAdvisor <https://webadvisor.redwoods.edu> and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions. For more information see the [Redwoods Public Safety Page](#).

In an emergency that requires an evacuation of the building anywhere in the District:

- Be aware of all marked exits from your area and building
- Once outside, move to the nearest evacuation point outside your building
- Keep streets and walkways clear for emergency vehicles and personnel

Do not leave campus, unless it has been deemed safe by the campus authorities.

Del Norte Campus Emergency Procedures

Please review the [Crescent City campus emergency map](#) for campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information, see the [Redwoods Public Safety Page](#).

Eureka Campus Emergency Procedures

Please review the [campus emergency map](#) for evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information on Public Safety go to the [Redwoods Public Safety Page](#). It is the responsibility of College of the Redwoods to protect life and property from the effects of emergencies within its own jurisdiction.

In the event of an emergency:

1. Evaluate the impact the emergency has on your activity/operation and take appropriate action.
2. Dial 911, to notify local agency support such as law enforcement or fire services.
3. Notify Public Safety 707-476-4111 and inform them of the situation, with as much relevant information as possible.
4. Public Safety shall relay threat information, warnings, and alerts through the Everbridge emergency alert system, Public address system, and when possible, updates on the college website, to ensure the school community is notified.
5. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet, (evacuation to a safe zone, shelter in place, lockdown, assist others if possible, cooperate with First Responders, etc.).

6. If safe to do so, notify key administrators, departments, and personnel.
7. Do not leave campus, unless it is necessary to preserve life and/or has been deemed safe by the person in command.

Klamath Trinity Campus Emergency Procedures

Please review the responsibilities of, and procedures used by, the College of the Redwoods, Klamath-Trinity Instructional Site (KTIS) to communicate to faculty, staff, students and the general public during an emergency. It is the responsibility of College of the Redwoods, Klamath-Trinity Instructional Site (KTIS) to protect life and property from the effects of emergency situations within its own jurisdiction.

1. In the event of an emergency, communication shall be the responsibility of the district employees on scene.
 - a. Dial 911, to notify local agency support such as law enforcement or fire services.
 - b. If safe to do so, notify key administrators, departments, and personnel.
 - c. If safe to do so, personnel shall relay threat information, warnings, to ensure the school community is notified.
 - d. Contact Jolene Gates 530-625-4821 to notify of situation.
 - e. Contact Hoopa Tribal Education Administration office 530-625-4413
 - f. Notify Public Safety 707-476-4111.
2. In the event of an emergency, the responsible district employee on scene will:
 - a. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet.
 - b. Lock all doors and turn off lights if in lockdown due to an active shooter or similar emergency.
 - c. Close all window curtains.
 - d. Get all inside to safe location Kitchen area is best internal location.
 - e. If a police officer or higher official arrives, they will assume command.
 - f. Wait until notice of all is clear before unlocking doors.
 - g. If safe to do so, move to the nearest evacuation point outside building (Pooky's Park), directly behind the Hoopa Tribal Education Building.
 - h. Do not leave site, unless it has been deemed safe by the person in command. Student Support Services (required for online classes)

Student Support Services

The following online resources are available to support your success as a student:

- [CR-Online](#) (Comprehensive information for online students)
- [Library Articles & Databases](#)
- [Canvas help and tutorials](#)
- [Online Student Handbook](#)

[Counseling](#) offers assistance to students in need of professional counseling services such as crisis counseling.

Learning Resource Center includes the following resources for students

- [Academic Support Center](#) for instructional support, tutoring, learning resources, and proctored exams. Includes the Math Lab & Drop-in Writing Center
- [Library Services](#) to promote information literacy and provide organized information resources.
- [Multicultural & Diversity Center](#)

Special programs are also available for eligible students include

- [Extended Opportunity Programs & Services \(EOPS\)](#) provides services to eligible income disadvantaged students including: textbook award, career academic and personal counseling, school supplies, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!
- The TRiO Student Success Program provides eligible students with a variety of services including trips to 4-year universities, career assessments, and peer mentoring. Students can apply for the program in [Eureka](#) or in [Del Norte](#)
- The [Veteran's Resource Center](#) supports and facilitates academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821

CHEM 100 ONLINE THE COURSE SYLLABUS

CONTACT INFORMATION

Instructor: Paul Farnham

Contact: paul-farnham@redwoods.edu

Office Hours: By arrangement

Students are required to access their Canvas accounts. Any emails sent to your instructor will be responded to within 24 hours. OCCASIONAL IMPORTANT COURSE ANNOUNCEMENTS MAY BE SENT TO YOUR Canvas Inbox so check it at least every day. For you to get the most out of this course, you need to be engaged in it on a daily basis.

GENERAL OUTLINE OF THE COURSE

2 modules are assigned each week. Each Assignment consists of:

- Reading
- Example problems and linked files with videos or more practice problems
- An **Assignment**
- and sometimes a discussion question

The assignment will consist of practice problems that will be submitted using the **Assignments** tool in Canvas. **The 1st module of each week is due by midnight on Tuesday. The 2nd module of the week is due on Friday by midnight.** It is advisable that you not wait until the last minute to do the reading, study the examples and do the home work as it is in any class. This will give you time to reread the Lesson or sent an **Inbox inquiry** to your instructor about points you don't understand. You will get feedback on your submitted work, in the form of a reply on your returned Assignment, on Wednesdays and Saturdays. The **Lessons** for the next week will be posted on the website Saturdays and remain on the website for the rest of the semester.

For information on the actual operation of the Canvas website, to view the lessons and send

messages to your instructor or participate in the chat room or forums, please see the Announcements section of the Home page for CHEM 100 on Canvas. The Announcements also has a list of locations where there are computers with Internet access that you can use.

Using a “scientific calculator” - one capable of entering numbers in exponential notation and finding logarithms is necessary in this course.

TECH DETAILS:

Your online course is located in Canvas, accessed from the CR homepage.

For technical issues with Canvas or problems accessing your student email, contact Technical Services at 707.476.4160 or email support@redwoods.edu. All technical issues related to online courses are resolved by the Technical Services department. They have an online ticketing system you may also use at <http://support.redwoods.edu>.

THE SCHEDULE for spring, 2022

Week 1

Module 1 - Unit Systems-Metric and English

Module 2 - Reading scales, significant figures, uncertainty, calculators and scientific notation

Week 2

Module 3 - Conversion factors and the unit analysis method of problem solving

Module 4 - More practice with the unit analysis method of problem solving

Week 3

Module 5 - % problems

Module 6 - Verifying equations with unit analysis

Week 4

Module 7 - Practice TEST on modules 1 -6

Module 8 - TEST on modules 1-6

Week 5

Module 9 - scientific notation and estimating answers

Module 10 - Geometric formulas and graphing data

Week 6

Module 11 - logarithms

Module 12 - Basic physics of chemistry

Week 7

Module 13 - Physical properties of matter

Module 14 - Chemical formulas and the mole concept

Week 8

Module 15 - TEST on modules 7 -14

Module 16 - How are chemical formulas determined?

Week 9

Module 17 - Naming compounds

Module 18 - Chemical reactions

Week 10

Module 19 - Chemical calculations based on a balanced chemical equation

Module 20 - More practice with chemical calculations

Week 11

Module 21 - Solutions - concentration units, making solutions

Module 22 - Using solutions in reactions

Week 12

Module 23 - net ionic equations

Module 24 - TEST on modules 15 -23

Week 13

Module 25 - Gases and the Ideal Gas Law

Week 14

Module 26 - Gases in stoichiometry problems

Module 27 - Acid and Bases

Week 15

Module 28 - Energy and Chemistry

Module 30 - Review for the Final

Week 16

Module 31 – FINAL EXAM DUE

COURSE GRADING

Participation* in chat room and forums - 40 points, (5% of total course)

The module practice problems - 290 points, 10 pts per assignment, (40% of total)

The 3 tests - 300 points, 100 points each, (40% of total course)

The final exam - 110 points, (15% of the total course grade)

* This means Substantial Participation - active in discussions once a week; asking for help on specific parts of a problem or contributing solutions to specific parts of a problem.

READ THE ADDITIONAL INFORMATION PAGE ATTACHED BELOW!

This syllabus is subject to change.