

CHEM 104-006 Chemistry & Problem-Solving Fundamentals
Fall 2019 Syllabus

Instructor: Dr. Dammann

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Office: Sims 109A

Office Hours: Monday 3:00 pm – 5:00 pm, or by appointment

Lecture: TR 5:00 pm – 6:15 pm, Sims 209

Course Credit Hours: 3

Required Textbook: *Calculations in Chemistry* (2nd edition, Dahm & Nelson)

Required Calculator: Scientific Calculator with logarithms and exponential notation functions. Cell phones (or other electronic gadgets) may NOT be used. Bring your calculator to class each week.

Course Objectives:

- Develop critical thinking and problem-solving skills.
- Gain an understanding of the fundamental concepts of chemistry.
- Build a foundation of good study habits and knowledge for CHEM 105 and other science courses.
- Better understand how chemistry relates to the world around us.

Course Outline:

- CHEM 104 is an **intense problem-solving course** that focuses on the fundamentals of chemistry and different methods of problem-solving. The development of problem-solving and critical thinking skills in CHEM 104 meets Winthrop's University Level Competency 1:
- In CHEM 104, we will examine the following topics:
 - Unit systems, significant figures, scientific notation, dimensional analysis
 - Concepts of matter, subatomic particles, atoms and ions, isotopes
 - Periodic Table, chemical periodicity, electronic structure, chemical bonds
 - Chemical nomenclature, chemical formulas
 - Mole concept, chemical reactions, stoichiometry, gas laws
 - Solutions, molarity, acids, bases, salts, chemical equilibrium

Web Resources: In addition to lectures, Blackboard and Email are sources of information for this course.

Blackboard Website: <https://bb-winthrop.blackboard.com/webapps/login/> **Required Problem-Sets will be accessible on Blackboard.**

Attendance:

- Attendance will be taken at each class meeting. You are expected to attend all class meetings. If you miss a class, it is your responsibility to obtain lecture notes from another student in the class. You are responsible for all information covered during class, whether or not you were present. Turn off cell phones in class.
- You are responsible for any announcements made in class, on Blackboard, or by email. Make sure you have access to your Blackboard account, that your correct email is included in the class list server. Check your Winthrop email and Blackboard accounts at least once a day for any updates.
- Absence from a test or quiz without a written doctor's excuse (or valid documentation from a similar external agency) is inexcusable. An unexcused student absence will result in a zero for the missed grade.

Class/Exam Preparation: CHEM 104 is a rigorous course that requires daily preparation.

- Read assigned text sections and complete assigned homework before each lecture.
- Take good notes in lecture, develop good study habits and study course material each day.
- Do assigned homework Practice and end-of-chapter Review Quiz problems in the textbook, and complete posted Problem-Sets in Blackboard.

Exams and Grading:

1. There will be four exams worth 100 points each. **No make-up exams will be given**. Tentative exam dates are noted on the course schedule.
2. The comprehensive final exam is worth 200 points. You must take the final exam to pass the course. The final exam for CHEM 104-006 will be on December 7, 2019 (Saturday) at 11:30 am in Sims 209.
3. Quizzes and Problem-Sets (25% of course grade) will be given throughout the semester, in class or assigned as homework. Quiz and Problem-set dates are noted on the course schedule.
4. You have one week from the time a graded assignment is returned/posted to Blackboard to question the grading. After a week, I will not change any grade.
5. Letter grades will be assigned as follows: A 88-100%, B 76-87%, C 66-75%, D 56-65%, F<56%

Total Possible Points: 800 pts Exams: 400 pts Final Exam: 200 points Quizzes & Problem-Sets: 200 pts

Exams: You will need a Scientific Calculator (non-programmable) for exams. Cell phones, pagers and sharing of calculators are strictly prohibited during exams and quizzes. Bring your Scientific Calculator to each exam & quiz.

Grades: I will not discuss grades via email. If you have a question about your grade, please stop by my office.

Student Conduct Code: Responsibility for good conduct rests with students as adult individuals. The policy on student academic misconduct is outlined in the Student Conduct Code Academic Misconduct Policy in the online Winthrop *Student Handbook* (<https://www.winthrop.edu/uploadedFiles/studentconduct/StudentHandbook.pdf>)

Course Withdrawal: Friday, October 18th is the last day to withdraw from a full fall semester course with an automatic N grade issued. Students may not withdraw from a course after this date without documented extenuating circumstances as determined by the University.

Communication: Information may be sent via Blackboard or the Class List Server. Be sure to check your Winthrop email each day for Class Emails. If you have any questions, please stop by and see me during my office hours. If my office hours are not convenient for you, please email me to set up an appointment.

Homework/Reading Assignments: You are expected to complete each reading assignment and all assigned homework problems. Assigned homework and review quiz problems from the textbook will be good practice when you prepare for exams.

Email: It is important to check your Winthrop email daily. If you registered for the course late, you will need to manually subscribe to the listserv. If you drop the course, you will need to unsubscribe to the list or you will continue to receive all emails I send. You can find directions at <http://www.winthrop.edu/acc/classlist.htm>.

Syllabus/Course Schedule: The Syllabus & Course Schedule may be adjusted, as needed, during the semester.

Students with Disabilities/Need of Accommodations for Access: **Winthrop University is committed to providing access to education. If you have a condition which may adversely impact your ability to access academics and/or campus life, and you require specific accommodations to complete this course, contact the Office of Accessibility (OA) at 803-323-3290, or, accessibility@winthrop.edu. Please inform me as early as possible, once you have your official notice of accommodations from the Office of Accessibility.**

Academic Success Center: Winthrop's Academic Success Center (ASC) is a free resource for all undergraduate students seeking to perform their best academically. ASC offers a variety of personalized & structured resources to help students achieve academic excellence, such as tutoring and academic skill development, and group/individual study spaces. The ASC is located on the first floor of Dinkins, Suite 106. If you wish to request a tutor, you must attend ONE Tutee Seminar, offered every Tuesday and Friday until mid-semester. Please contact the ASC at 803-323-3929 or success@winthrop.edu if you have any questions. For more information on ASC services, please visit www.winthrop.edu/success.