CHEM105 Section 003, Spring 2018 Course Syllabus

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Office hours: MW 10:00-11:00 and TR 12:00 - 1:00 or by appointment
Meeting Times: 8:00 – 9:15 on Monday and Wednesday
                9:30 – 10:45 on Tuesday and Thursday
Meeting Place: Sims 105

Credit Hours: 4
Course Website: Blackboard

Required Material: Activity Packet – you can buy this at the bookstore for $12.

Textbook (optional): OpenStax Chemistry: Atoms First

Web and Electronic Resources: All course material will be available on Blackboard.

Course Objectives and Student Learning Upon completion of this course, the successful student will be able to:

• Understand and appreciate the Scientific Method.
• Understand and apply the basic concepts used in chemistry.
• Think critically about problems.
• Use a variety of appropriate problem solving strategies.
• Understand and communicate scientific topics.
• Recognize chemistry outside the classroom

University Level Competencies:

• Competency 1: Winthrop graduates think critically and solve problems.
• Competency 2: Winthrop graduates are personally and socially responsible.
• Competency 3: Winthrop graduates understand the interconnected nature of the world and the time in which they live.
• Competency 4: Winthrop graduates communicate effectively.

Material Discussed:

• Dimensional Analysis and Unit Conversions
• Periodic Trends
• Molecular Shape and Structure
• Nomenclature
• Chemical Formulas and Equations
• Stoichiometry
• States of Matter
• Energy
• Intermolecular Forces
• Gas Laws
• Chemical Equilibrium
• Chemical Kinetics
• Solution Chemistry
• Acid-Base Chemistry
Grading for the Course:

A: > 90%  B+: > 87%  B: > 80%  C+: > 77%  C: > 70%  D: > 60%  F < 60%

**Video Quizzes (5%):** New content will be delivered through lecture videos. These videos are intended to prepare you for class, will be posted on the Blackboard page, and will have simple questions at the end of each video. To receive credit, these must be completed prior to class and, to be clear, you will be lost in class if you don’t view them.

**Problem Sets (25%):** Problem sets will be due **one day before EVERY exam at 7:00 PM.** You are STRONGLY encouraged to keep up on your problem sets by completing each section as we cover it in class; this will undoubtedly help you on the weekly quizzes. As an incentive to keep up, shorter sections will be available for bonus credit and will be due by the date identified on Blackboard. Answers will be submitted on Blackboard or you can print out the full problem set from Blackboard, write your answers on the sheet, and submit to me in class on the due date. An answer key will be available at 7:01 PM the day that the problem set is due.

**Partner Exam (5%):** The first exam of the term is a partner exam and will count as 5% of your course grade.

**Group Activities (15%):** Class activities are the primary way that you will explore course content – these activities constitute your most valuable learning opportunity and participation in class will reward you with 15 % of your course grade. These will be submitted through Blackboard on the day they are completed in class.

**Tests (30%):** Exams 2, 3, and 4 are individual exams that each count equally and accumulate to 30 % of your course grade. These are designed to assess your mastery of the material. They will require you demonstrate your understanding of concepts and problem solving ability. To receive an A, you will need to apply what you have learned to scenarios that are different than what you saw in problem sets and activities. Keep in mind that they are specifically designed to be difficult. You will have 75 minutes to complete each exam.

**Final Exam (20%):** The final exam is scheduled from 8:00 – 10:30 on the morning of Tuesday, May 1st. It will be cumulative and will reward attempting difficult problems.

**Point Distribution**

![Pie chart showing the distribution of grades and assignments]

- **Final Exam:** 20%
- **Problem Sets:** 25%
- **Video Quizzes:** 5%
- **Partner Exam:** 5%
- **Group Activities:** 15%
- **Exams:** 30%
**Attendance:** I will not take attendance; absence from a quiz or test without a verifiable excuse is inexcusable and the student will receive a zero for that test. Absence from a test with a legitimate excuse will be accepted and a makeup exam will be arranged. **Please be on time.** I find tardiness disrespectful and chronic tardiness will not be tolerated.

**Late Work Policy:** NO WORK WILL BE ACCEPTED AFTER THE KEY IS AVAILABLE.

**Drop Policy:** As described in the Winthrop University Undergraduate catalog

**Syllabus Change Policy:** Sincere effort has been made to ensure that this syllabus accurately reflects notable information for the entire term. However, if circumstances necessitate a minor modification, students will be immediately notified.

**Student code of conduct:** As noted in the 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 Student Handbook (http://www2.winthrop.edu/studentaffairs/handbook/StudentHandbook.pdf).

**Students with Disabilities:** Winthrop University is dedicated to providing access to education. If you have a disability and require specific accommodations to complete this course, contact the Office of Disability Services (ODS) at 803-323-3290. Once you have your official notice of accommodations from the Office of Disability Services, please inform me as early as possible in the semester.

**Study Tips:**

- Do not expect to do well in the class if you’re not prepared to commit 10 hours per week to studying.
- Watch all video lectures and complete all homework (assigned **AND** suggested).
- Treat the lecture videos like a traditional classroom lecture. Pay close attention and **take notes**.
- Watch the lectures again.
- Stay active during the lectures by taking good notes and asking questions (or writing down questions to ask the instructor).
- **ASK QUESTIONS!** I respond to email questions very quickly as long as I’m awake.
- Review other sources of information (plenty of General Chemistry textbooks are available in the library).
- Regularly review lecture notes. Think you understand…review the notes one more time.
- Be prepared for and actively participate in the collaborative group sessions.
- Do all the work more than once.
- **ASK QUESTIONS!**

**Tutoring Opportunities**

Winthrop’s Academic Success Center (ASC) is a free resource for all undergraduate students seeking to perform their best academically. The ASC offers a variety of personalized and structured resources that help students achieve academic excellence, such as tutoring, academic skill development (test taking strategies, time management counseling, and study techniques), group and individual study spaces, and academic coaching. The ASC is located on the first floor of Dinkins, Suite 106. Please contact the ASC at 803-323-3929 or success@winthrop.edu. For more information on ASC services, please visit www.winthrop.edu/success.