CHEM105 Section 003, Spring 2017 Course Syllabus

Instructor:

Dr. Nicholas Grossoehme Office: Sims 302A Phone: 323-4955

grossoehmen@winthrop.edu

Office hours: M and W 9:00-11:00 or by appointment

Meeting Times: 8:00 – 8:50 on Monday and Wednesday (Sims 105)

9:30 – 10:45 on Tuesday and Thursday (Sims 105)

Credit Hours: 4

Course Website: bit.ly/Chem105

Textbook: Chemistry: Atoms First. Neth, Flowers, Theopold, Langley. This book is available at absolutely no cost from OpenStax (https://openstax.org/details/books/chemistry-atoms-first). You can purchase a hard copy if you would like for \$65.00. See instructions on the website. A user-friendly online version or downloadable pdf are available at no cost.

Web and Electronic Resources: Information (e.g. problem sets and electronic versions of lectures) will be distributed through the <u>course website</u>. Periodically, I may provide supplementary videos to help clarify a topic; these will be available on the <u>WUtopia! website</u>.

<u>ALEKS</u> is an optional but very strongly encouraged electronic resource that will help you learn the problem solving aspect of the material.

Course Objectives and Student Learning Outcomes (in accordance with University Level Competency 1): 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.

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

Tentative Course Schedule: Available on the course <u>website</u> **Grading for the Course:**

Homework: Problem sets count as 20% of your grade and will be due **one day before EVERY exam**. 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, 2% bonus credit will be awarded for each section you **complete** by the date identified on your problem sets. Answers can be submitted through the course website or handed to me. An answer key will be posted at 7:01 PM the day that the problem set is due.

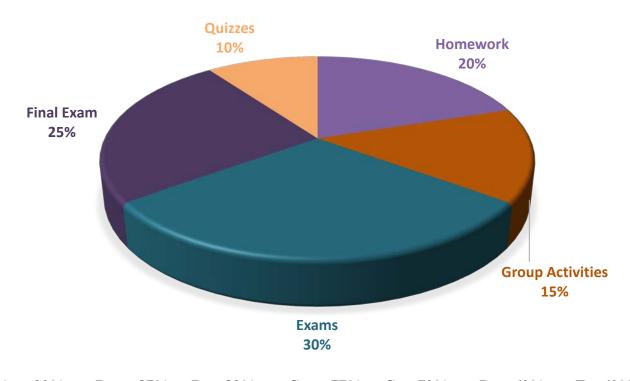
Quizzes: Weekly quizzes will be given every non-exam week throughout the term. Each quiz will be weighted equally.

Group Activities: Two partner exams (one in class and one take home) will be given during the term. These will count as at least 80% of the Group Activities grade. Participation in at least one Chemistry Tutoring session will count as 10% of this category. Attendance and participation in the scheduled workdays may count as the final 10%.

Tests: Exams, worth 100 points each, and will be taken in class. These are designed to assess your mastery of the material. They will require you to apply what you have learned to a variety of different scenarios. Keep in mind that they are specifically designed to be difficult. You will have 75 minutes to complete each exam.

ALEKS Objectives: ALEKS is an online tutoring service that WILL help you with your homework and prepare you for exams. By the end of the term you should register 100% mastery of the material in your pie chart. Completing ALEKS is optional. Points awarded will be directly based on the Gradebook and will replace one exam grade if it helps your grade. <u>Click here to see the getting started document for ALEKS</u>. You will need the following course code to register: **PPL3G-9XGMH.**

Point Distribution



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

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 Chemistry department offers tutoring for this class. Tutoring meets MTW evenings from 7-9 in Sims 301 and TR from 11-12:15 in Sims 209. The Thursday tutoring session will focus on CHEM105 material.
- 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.
- Private peer tutors may be available at a price negotiated by you and the tutor. Contact Dr. Grossoehme for inquiries.