CHEMISTRY 1301
Fundamental Chemistry
CRN: 16690
Fall 2016

INSTRUCTOR: Bill Taylor
OFFICE: Laney Annex 125
OFFICE HOURS: TTh 2:30 – 4:00; W 8:00 – 11:00, 1:00 – 3:00
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I. COURSE INFORMATION

CLASSES: Lecture - LAN-MAN 104, TTh, 10:50 – 12:05

TEXTS: Lecture - STOICHIOMETRY BOOT CAMP: PREPARING STUDENTS FOR COLLEGE CHEMISTRY; Mauldin and White, 3rd ed.

OTHER REQUIREMENTS: Scientific calculator

DESCRIPTION: The purpose of this course is to provide the background necessary for subsequent study in chemistry. Basic concepts of chemistry for students with limited or no previous chemistry instruction. Lecture, small group work, and laboratory demonstrations are used in the course. CHEM 1301 may not be used to satisfy any chemistry requirement in conjunction with CHEM 1402 or 1450.

OBJECTIVES: Upon completion of this course, the student should have gained an understanding of the following topics:

- basic concepts in chemistry in the following content areas: atomic structure, atomic number, atomic mass, elemental symbols, ionic compounds, molecular compounds, nomenclature, chemical equations
- solve problems regarding dimensional analysis, rounding, stoichiometry, molar mass, Avogadro's number, stoichiometry
- apply the factor-label method (dimensional analysis) to solve problems in chemistry whenever appropriate, particularly with the conversion of units and stoichiometry
- Motivation for studying in ways that help to achieve long-term retention of facts and concepts.

GRADING: Your grade for the course will be based on the number of points accumulated out of a total of 900. The breakdown is as follows:

Hourly exams	400
Final Exam	200
TOTAL	600

Final grades will be assigned according to the following percentages and are ***non-negotiable***:

A = 90+%
B = 80% - 89%
C = 65% - 79%
D = 55% - 64%
F = <55%

BLACKBOARD
Some components of this course will be delivered via Blackboard. All students registered for this class are automatically registered in its Blackboard component. Information such as this syllabus, lecture materials, and exam schedules will be provided via this medium. Note that this should not be construed as "distance learning". The information provided via Blackboard is intended as an instructional enhancement and not a substitute for coming to class.

COMMUNICATION VIA EMAIL
I will communicate assignments and other information from time to time using email. Emails will be sent exclusively via Blackboard email. It is the responsibility of the student to check his/her email regularly regarding class information.

HOMEWORK
Homework sets will be distributed to the class throughout the semester in the form of worksheets. These will be available via Blackboard. Homework will not be graded or taken up; however, these problem sets will be reflective of content that will be seen on exams. We will frequently use class time to do problems from these worksheets.

II. POLICIES

ATTENDANCE
Students are expected to attend all scheduled classes. If a lecture is missed, the student should make every effort to obtain lecture notes for that day from a classmate. There is a definite correlation between lecture attendance and exam performance. If a student misses three (3) lectures without notifying the instructor or officially dropping the course, the instructor reserves the right to assign an "F" or "WF".

NO MAKEUP EXAMS WILL BE GIVEN

THERE ARE NO "EXTRA CREDIT" ASSIGNMENTS – ***DON'T ASK***

Missing an exam is *rarely* excusable. It is the responsibility of the student to provide legitimate, documented proof as to the nature of the absence within 24 hours of the absence. Whether or not the absence is excusable is left to the discretion of the instructor. Be aware that excuses such as "I was sick", or "I had to find my roommate who stayed out all night" are not acceptable.

TARDINESS
Chronic tardiness is disrespectful of the instructor and other students. As such, it is unacceptable and will not be tolerated. Any student arriving late to lecture in excess of five minutes will be counted absent for the day.

GRADING DISPUTES
Suspected errors in grading must be brought to the attention of the instructor within 24 hours of the time when the assignment or exam is handed back. Grading disputes initiated beyond this 24 hour period may not be considered by the instructor. The final decision on disputes brought within the 24 hour period falls entirely within the discretion of the instructor.

CELLPHONES
Cellphones must be put away and silent during class. ***Cellphone usage of any type during class is not allowed.*** This is a discourtesy to your fellow classmates and to me. Cellphones ***may not*** be used as calculators at any time, i.e.; in class or on exams. If you must leave the room during an exam (bathroom, allergy attack, etc.), you will be required to leave your cellphone with me while you are out of the room.

ACADEMIC INTEGRITY
The University of Central Arkansas affirms its commitment to academic integrity and expects all members of the university community to accept shared responsibility for maintaining academic integrity. Students in this course are subject to the provisions of the university's Academic Integrity Policy, approved by the Board of Trustees as Board Policy No. 709 on February 10, 2010, and published in the *Student Handbook*. Penalties for academic misconduct in

this course may include a failing grade on an assignment, a failing grade in the course, or any other course-related sanction the instructor determines to be appropriate. Continued enrollment in this course affirms a student's acceptance of this university policy.

TITLE IX DISCLOSURE

If a student discloses an act of sexual harassment, discrimination, assault, or other sexual misconduct to a faculty member (as it relates to "student-on-student" or "employee-on-student"), the faculty member cannot maintain complete confidentiality and is required to report the act and may be required to reveal the names of the parties involved. Any allegations made by a student may or may not trigger an investigation. Each situation differs and the obligation to conduct an investigation will depend on those specific set of circumstances. The determination to conduct an investigation will be made by the Title IX Coordinator. For further information, please visit: https://uca.edu/titleix. **Disclosure of sexual misconduct by a third party who is not a student and/or employee is also required if the misconduct occurs when the third party is a participant in a university-sponsored program, event, or activity.*

EMERGENCY PROCEDURES

An Emergency Procedures Summary (EPS) for the building in which this class is held will be discussed during the first week of this course. EPS documents for most buildings on campus are available at *http://uca.edu/mysafety/bep/.* Every student should be familiar with emergency procedures for any campus building in which he/she spends time for classes or other purposes.

AMERICANS WITH DISABILITIES ACT STATEMENT

The University of Cental Arkansas adheres to the requirements of the Americans with Disabilities Act. If you need an accommodation under this Act due to a disability, contact the UCA Office of Disability Services at 450-3613.

COURSE EVALUATIONS

Student evaluations of a course and its professor are a crucial element in helping faculty achieve excellence in the classroom and the institution in demonstrating that students are gaining knowledge. Students may evaluate courses they are taking starting on the Monday of the thirteenth week of instruction through the end of finals week by loggin in to my UCA and clicking on the Evals button on the top right.

These and other important policies are outlined in the *UCA Student Handbook*, which can be found at: *http://uca.edu/student/student-handbook/* . The student is encouraged to familiarize him/herself with all of the policies contained within that document.

III. LECTURE SCHEDULE, FALL 2016

Week	Topics	Target Exam Week
8/15 – 8/19	Orientation	
8/22 – 8/26	Modules 1-3: Rounding; Exponents; Solving for *x*	
8/29 – 9/2	Modules 4-6: Percentages; Scientific Notation; Measured Quantities, Significant Figures	
9/5 – 9/9	Modules 7-9: Calculations with Significant Figures; Metric Prefixes, One-Step Conversions	Exam 1: Modules 1-7
9/12 – 9/16	Modules 9-10: One-Step Conversions; Two-Step Conversions	
9/19 – 9/23	Modules 11-12: Conversions with Squared and Cubed Units; Conversions with Derived Units	
9/26 – 9/30	Modules 12-13: Conversions with Derived Units; Elements, Atomic Number, and Ions	Exam 2: Modules 8-12
10/3 – 10/7	Modules 14-15: Isotopes and Atomic Mass; Chemical Compounds	
10/10 – 10/14	Module 16: Balancing Chemical Equations	
10/17 – 10/21	Modules 17-19: The Mole; Molar Mass, Percent Composition	Exam 3: Modules 13-17
10/24 – 10/28	Modules 20-22: Avogadros' Number; Mole-Mole Stoichiometry; Mass-Mass Stoichiometry	
10/31 – 11/4	Modules 22-23: Mass-Mass Stoichiometry; Limiting and Excess Reagents	
11/7 – 11/11	Module 23: Limiting and Excess Reagents	Exam 4: Modules 18-23
11/14 – 11/18	Molarity; Solution Stoichiometry	
11/21 – 11/25	Solution Stoichiometry; ***Thanksgiving Break***	
11/28 – 12/2	Catch-up/Consolidation	Exam 4: Modules 24-25
12/5 – 12/9		Final Exam 12/8; 11:00 – 1:00; Comprehensive