CASPER COLLEGE COURSE SYLLABUS

Chem 1028: Chemistry I Lab

Semester/Year: Fall 2015

Lecture Hours: 0 **Lab Hours**: 3 **Credit Hours**: 1

Class Time:
01: 8-10:50 AM; 02: Th 8-10:50 AM; 03: M 1:00-3:50PM;
04: T 04: 1:00-3:50 PM; 06: Th 1:00-3:50 PM

Room: PS301

Instructor's Name: Mitchel D. Millan, Ph.D.

Office Location: PS333 **Office Phone**: 268-3017 **Email**: mmillan@caspercollege.edu

Office Hours: MWF 10-11 AM, W 1-3 PM

Course Description:
Introductory chemistry laboratory used to introduce the student to laboratory equipment and technique and to demonstrate some of the chemical laws discussed in CHEM 1025 (Chem 1025 taken WITH Chem 1028 equivalent to UW Chem 1020).

Statement of Prerequisites: must be taken concurrently with or subsequently to, Chem 1025

Goal: This lab will introduce students to practical laboratory techniques and requisite calculations through completion of several fundamental chemistry experiments and post laboratory problems.

Outcomes:

1. Learn to use the Scientific Method in this lab course.
2. Solve problems using critical thinking.
3. Use quantitative analytical skills to evaluate and process numerical data.

Course Objectives:
Upon successful completion of this course, students will:
1) be aware of basic safety and emergency procedures when performing chemistry experiments.
2) be trained in the proper procedures for performing experiments, and in the proper handling and use of chemical reagents, glassware, equipment, and balances.
3) understand the concepts of General Chemistry, including requisite calculations, that the laboratory experiments are meant to illustrate and reinforce.

Methodology: Lab Experiments will be performed, typically preceded by a discussion of salient points of the experiment for the day, as well as a review of the experiment from the previous meeting.

Evaluation Criteria:

- Ten LABORATORY REPORTS (50 pts each). The correct format for these reports will be discussed separately from this syllabus. All reports are due at the end of each lab period.
- Ten LAB PROLEM SETS (25 pts each). Like the lab reports, these question sets must be completed by the end of each lab period. In order to facilitate your completing theses in a timely manner, the pdf files of these Problem Sets will be made available in your LECTURE (Chem 1025) Moodle shell in advance of the lab day in which they are due.
- Missed experiments can only be made up upon the discretion of your instructor. No missed lab reports or questions sets will be accepted unless the entire experiment (including actual experiment work) is made up.
- A MIDTERM EXAM (125 pts) covering the first five experiments and a FINAL EXAM (125 pts) covering the last five experiments. These cannot be made up if missed.

GRADE DISTRIBUTION	***GRADING SCALE***
Lab Reports (500 pts): **50%**	A: 900 – 1000 pts
Lab Question Sets (250 pts): **25%**	B: 800-899 pts
MidTerm Exam (125 pts): **12.5%**	C: 700-799 pts
Final Exam (125 pts): **12.5%**	D: 600-699 pt

Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.

Required Text, Readings, and Materials: none

Class Policies / Last Date to Change to Audit Status or to Withdraw with a W Grade:

- By registering for, and staying in, this class, you agree to (i) abide by the policies, and (ii) fulfil all the requirements, described in this syllabus. Your instructor reserves the right to make revisions and modifications to this syllabus as needed, subject to sufficient notice to the class of such changes. You are responsible for all announcements (verbal or written), as well as changes in the schedule, whether or not you are in class. Absence neither excuses you from responsibility, nor entitles you to special opportunities or extra notification.
- Your instructor will give you complete information on safety equipment (e.g. safety glasses required, but provided. Lab coat recommended), safety procedures (safe handling of glass, flame, chemicals, etc.), and waste disposal. You are required to obey all instructions issued by your instructor- for your own safety and comfort. You are required to dispose of waste chemicals in the manner prescribed by your instructor unless you are told it is safe to dispose of them in the wastebaskets or down the drain.
- Your instructor reserves the right to initiate an FIW after two continuous weeks of absence (two meetings), and an RA at his discretion.
- Come to class on time. Coming late ***can be*** disruptive, and ***is*** disrespectful to your classmates and instructor. Your instructor reserves the right to deny attendance sign-up to latecomers.
- Turn your cell phones off. If you make or answer a phone call during class, your classmates may (in fact, are strongly encouraged to) listen in and join in your conversation,
- The last day for withdrawal (a grade of W) without instructor permission is Nov 12.

Student Rights and Responsibilities: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

Chain of Command: If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head (Dr. Eric Mechalke), the Dean of the School of Science (Dr. Grant Wilson), and lastly the interim Vice President for Academic Affairs (Dr. Shawn Powell).

Academic Dishonesty - Cheating & Plagiarism: Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

Official Means of Communication: Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly.

ADA Accommodations Policy: If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, bheuer@caspercollege.edu . The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

Schedule

Date	Experiment*	Title
Aug 24,25,27	Introduction & Locker Check-In	-----
31, **Sept** 1,3	1	**Measurement, Precision, and Accuracy***
Sept 7,8,10	Labor Day week	No Labs
14,15,17	2	**Density and Law(s) of Conservation***
21,22,24	3	Definite Composition
28,29, **Oct** 1	4	Analysis of an Ionic Compound with an Oxyanion
Oct 5,6,8	5	Decomposition of Metal Hydrates
12,13,15	MidTerm Exam	-----
19,20,22	Fall Break week	No Labs
26,27,29	6	Spectroscopic Determination of the Concentration of a Copper(II) Solution
Nov 2,3,5	7	Titration of Acetic Acid with Sodium Hydroxide
9,10,12	8	Enthalpies of Dissolution and Neutralization
16,17,19	9	Emission Spectrum of Hydrogen
23,24,26	Thanksgiving Week	No Labs
30, **Dec** 1, 3	10	Lewis Structures and Valence Shell Electron Pair Repulsion
Dec 7,8,10	Final Exam & Locker Check-out	------

***Your instructor reserves the right to change the actual experiment(s) and / or the order in which they are performed, as circumstances require.**