

CASPER COLLEGE COURSE SYLLABUS

SEMESTER: Fall 2015

COURSE NUMBER & TITLE: CHEM 1038 02 Chemistry Laboratory II

LECTURE HOURS: 0 **LABORATORY HOURS:** 3 **CREDITS:** 1

CLASS TIME: 1:00 - 3:50 pm **DAYS:** Thursdays **ROOM:** PS 304

INSTRUCTOR'S NAME: Dr. Eric Mechalke

INSTRUCTOR'S OFFICE: PS 312 **PHONE:** (307) 268-2450

Office Hours: : 9:00-10:00 a.m. on M,W,F, 11-11:50am on T, and 10:00-11:00 a.m. on Th

COURSE DESCRIPTION:

Laboratory course designed as an introduction to typical chemistry laboratory equipment and techniques. Provides a demonstration of several principles discussed in CHEM 1035.

PREREQUISITES: Concurrent enrollment or credit in CHEM 1035 is required.

GOAL:

Demonstration of practical laboratory techniques and requisite calculations through completion of several fundamental chemistry experiments and post laboratory problems.

OUTCOMES:

Proficiency in techniques including measurements of mass, temperature, time, volume, and pH. Computational determination of quantities such as rate constants, enthalpy changes, electrochemical constants, and several types of equilibrium constants by various methods.

METHODOLOGY:

Laboratory will begin with a brief lecture in which detailed experimental procedures and precautions will be given. No laboratory work may begin before this lecture is heard. Written assignments including laboratory reports, and problem sets, will be due upon completion of the laboratory work. Cumulative post laboratory knowledge will be measured by a mid term and final examination.

EVALUATION CRITERIA:

Grades will be assigned according to overall performance on laboratory reports and problem sets, and the final examination. A total of 200 points are possible, with the following specific breakdown.

Ten Laboratory Reports	100 pts
Ten laboratory questions sets (assigned in lab)	50 pts
Mid term & Final Examination	50 pts

All laboratory reports and laboratory questions are due at the end of the laboratory period. No credit will be issued for assignments turned in late. Missed laboratories will result in a score of zero. Because problem and question sets involve class participation and group work, they may NOT be made up outside of lab under any circumstances. No make up laboratory times will be allowed. All students are required to successfully complete ten experiments. A straight curve will be followed in assigning final grades, which is provided below. Although the minimum score required may occasionally be lowered by a point or two for a particular cut off, this action is not guaranteed. These numbers will not be raised under any circumstances, and for that reason, they provide appropriate targets for desired grades.

A	180 - 200 pts
B	160 - 179 pts
C	140 - 159 pts
D	120 - 139 pts
F	0 - 119 pts

Unexcused absences for two consecutive weeks may result in automatic withdrawal from the course.

REQUIRED TEXT, READINGS, MATERIALS:

scientific calculator
safety glasses

required
provided

LATE DATE TO CHANGE TO AUDIT STATUS OR TO WITHDRAW WITH A "W" GRADE:

Officially, the last day for registration changes is Thursday, November, 12, 2015

STUDENT RIGHTS & 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/Program Director, the Dean, and lastly the Vice President for Academic Affairs.

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.

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: It is the policy of Casper College to provide appropriate accommodations to any student with a documented disability. If you have a need for accommodation in this course, please make an appointment with our Accommodative Services Counselor at 268-2557

CHEM 1038 TENTATIVE SCHEDULE WITH COURSE CONTENT:

<u>Week</u>	<u>Experiment Title</u>
August 24	No Lab
September 2	Equivalent Weight of a Metal
September 9	Molecular Weight of a Condensable Vapor
September 16	Molecular Weight from Freezing Point Lowering
September 23	Kinetics - Gas Evolution
September 30	Iodine clock reaction
October 8	Midterm
October 14	No Lab
October 21	No Lab
October 28	Acid-Base Titration
November 4	Analysis of a Fatty Acid
November 11	pH Titrations
November 18	Electrode Potentials
November 25	No Lab Thanksgiving Break
December 2	-- Determination of the Faraday
December 9	Final