

CASPER COLLEGE COURSE SYLLABUS
CHEM 1035-1 Chemistry II

Semester: Fall 2015

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

Class Time: 10:00am-10:50 am

DAYS: M, W, F

Room: PS 315

12:00-12:50 am T (Problem section)

Instructor's Name: Dr. Eric Mechalke

Office: PS 312

Phone: 268-2450

Email: mechalke@caspercollege.edu

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

Course Description: The second semester of a general course designed to meet the requirements of pre-professional, engineering, physical or biological science, and liberal arts majors. Topics covered are: Gas calculations, intermolecular forces, properties of solutions, thermodynamics, kinetics and mechanisms of chemical reactions, equilibrium situations, complex equilibria, electrochemistry, and, nuclear chemistry. Students needing laboratory credit should enroll concurrently in CHEM 1038. One problem class per week.

Prerequisites: A passing grade in Chemistry I (CHEM 1025) and MATH 1400 is required.

Goal: Mastery of the knowledge and analytical skills involved in the topics listed in the course description.

Outcomes: Demonstrated mastery and knowledge and analytical skills involved in the topics listed in the course description. Mastery is measured by performance on written exams and quizzes via, e.g., numerical problem solving, essay questions responses and multiple choice question responses.

Methodology: Lecture, questions, discussions, demonstrations, and in class activities.

Evaluation Criteria: This course will include ten quizzes and four hourly examinations. The number of homework assignments completed, out of ten, can be used to replace one quiz score.

	% of course average
Short Quizzes	25%
Hourly Exams	75%
Home Work	(The # of completed assignments will replace a quiz score).

Work and units must be present on problems!

Course Average	Grade
90-100	A
80- 89	B
65- 79	C
55- 65	D
Below 50	F

Tentative Schedule

Exam 1	Chapters 10,11,13,	Friday, September 18
Exam 2	Chapters 14, 15,	Friday, October 9
Exam 3	Chapters 16,17	Friday, November 13
Exam 4	Chapters 19, 20, 21	TBA

CLASS POLICIES: Examinations must be taken at the designated time and place within the designated time (50 min. or less). No notecards or cheat sheets will be allowed. Calculators only are permitted for examinations (i.e. no iPods, tablets, or phones). A missed examination will result in a score of zero. No make up examinations will be allowed, unless extreme circumstances exist and prior notification is received well in advance. If a make up examination is allowed, it **MUST** be completed before the next regularly scheduled class. Quizzes can be given at any time and thus, are pop-quizzes. All students must complete the comprehensive final examination. Any student not in class, when graded exams and quizzes are returned, forfeits their ownership of the materials (exams and quizzes are destroyed). Any student who is either absent for more than two weeks or who misses a scheduled examination may be subject to withdrawal from the course.

REQUIRED TEXT: *Chemistry, The Central Science*, 13th Ed. Brown, LeMay, Bursten

We will cover chapters 10, 11, 13, 14, 15-17, 19, 20, and 21 with some exceptions left up to the instructor's discretion. You are expected to read the assigned chapters before the appropriate lecture.

Other Materials:

Scientific calculator required

Last Date To Change To Audit Status Or Withdraw With A W Grade: Thursday, November 12, 2015

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/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. 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.

Tentative Calendar and Schedule Indicating Course Content:

Topic	Chapter	Reading	Problems	Due date TBA
Gases	10	398-432	5, 7, 9, 12, 13,15, 17, 19, 21, 23, 25, 27, 29, 31, 37, 39, 43, 45, 47, 49, 51, 55, 61, 63, 75, 77, 83, 85, 91, 93	
Intermolecular Forces	11	442-470	1, 4, 6, 8, 9, 11, 15, 17, 19, 21, 23, 25, 27, 33, 35, 39, 41, 47, 49, 53, 57, 61	
Properties of Solutions	13	530-564	1, 2, 3, 7, 9, 11, 13, 15, 17, 19, 21, 23, 27, 29, 31, 35, 37, 39, 43, 45, 47, 49, 53, 55, 61, 63, 65, 71, 73, 75, 77, 79, 85	Exam I
Chemical Kinetics	14	574-614	1, 2, 3, 6, 8, 9, 12, 16, 17, 19, 25, 27, 29, 31, 33, 35, 39, 41, 43, 47, 49, 51, 55, 57, 61, 65, 67, 69, 71, 73, 75,	
Chemical Equilibrium	15	628-661	1, 6, 7, 11, 13, 15, 17, 19, 21, 23, 25, 27, 31, 33, 35, 39, 41, 43, 47, 49, 51, 57, 59, 61, 63, 65, 67	Exam II
Acid-Base Properties	16	670-715	1, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 41, 43, 45, 47, 49, 51, 53, 55, 59, 61, 65, 67, 69, 71, 75, 77, 85, 87, 89, 93, 95, 97	
Aqueous Equilibrium	17	724-766	1, 4, 6, 7, 8, 9, 12, 13, 15, 17, 19, 21, 23, 25, 27, 29, 33, 35, 37, 39, 41, 49, 53, 55, 57, 59, 61, 63, 69, 77	Exam III
Chemical Thermodynamics	19	812-845	1, 4, 7, 10, 11, 13, 15, 17, 21, 23, 27, 29, 31, 33, 41, 43, 47, 53, 57, 65, 77, 79	
Electrochemistry	20	856-899	1, 3, 7, 10, 13, 15, 17, 23, 25, 31, 33, 43, 55, 57, 65, 69, 87, 91,	
Nuclear Chemistry	21	908-945	1, 6, 7, 9, 11, 15, 19, 21, 23, 27, 29, 33, 41, 49	Exam IV