

1. COURSE IDENTIFICATION

COURSE TITLE: Fundamentals of Chemistry
COURSE NUMBER: CEM 131
CREDIT HOURS: 4.00
MEETING TIMES: Monday 4-5:30 PM, Wednesday 4-7:30 PM
LOCATION: JC@LISD Chem Lab Room 111

2. INSTRUCTOR INFORMATION AND COURSE MATERIALS

INSTRUCTOR: Carley Kratz OFFICE: LISD TECH Center-Biochem Lab
PHONE: (517) 263-2108 E-MAIL: kratzcarleyj@jccmi.edu
OFFICE HOURS: By Appointment

TEXT: General, Organic, and Biological Chemistry, Edition Timberlake

CALCULATOR: A Scientific Calculator is Required

PERIODIC TABLE: SARGENT WELCH

LABORATORY MANUAL

3. COURSE DESCRIPTION & PREREQUISITES

COURSE DESCRIPTION:

Fills requirement for some non-science majors. Provides background for CEM 141 for those with no recent high school chemistry. Fundamental principles of chemistry such as states of matter, simple atomic and molecular structure, and the periodic classification of elements. The study of water emphasizes the properties of solutions and acid-base relations. Course includes a laboratory component.

Prerequisites: ENG 085* and MAT 031* or higher

This course is not an easy course. In order to be successful, students are expected to attend every class. Read the text before and after class. Work all homework problems, and ask questions of the instructor. Expect to earn your grade in this course by working hard and learning well.

4. ASSOCIATES DEGREE OUTCOMES

Chemistry 131 supports the following Associates Degree Outcomes:

#3 Students will demonstrate computational skills and mathematical reasoning.

#4 Students will demonstrate scientific reasoning.

5. SAFETY PROCEDURES

Students are expected to conduct themselves in a safe manner in both the classroom and laboratory. The Laboratory Safety Contract contains more comprehensive safety guidelines.

6. ATTENDANCE POLICY

Students are expected to attend all classes. Absences while sometimes necessary are to be avoided if possible. Walking into class late is disruptive to the class. Therefore, avoid tardiness and absences if possible. If you must miss class, be sure to contact the instructor. If you cannot attend class on the day that an assignment is due, make sure that the assignment is delivered to the instructor before the next class meeting.

7. MAKE-UP AND LATE PAPER WORK PROCEDURES

Even extenuating circumstances rarely allow for make-up. To compensate for extenuating circumstances, students will be allowed to drop their two lowest quiz scores and lowest lab report from the calculation of the final grade. Late assignments will not be accepted after said assignment has been graded and returned to the rest of the class.

Students are expected to be present for all examinations. However if extraordinary circumstances occur that causes one to miss an exam, the exam grade will be recorded as the average of the other exams (not including the final exam). Any additional missed exams will receive a "zero" grade and zero grades will be included in the average calculations.

8. GRADING PROCEDURE

HOMEWORK: Problems will be assigned at the end of each lecture session. It is in the student's best interest to work all problems assigned and any additional problems in order to develop the skills necessary to succeed in this course. Questions about the previous day's problems will be addressed in the next lecture.

QUIZZES: There will be a quiz associated with each chapter. Quizzes can be of several types, Take-Home, Announced In-class, and Surprise In-class. Surprise quizzes may occur at anytime. Take-Home Quizzes will be assigned periodically and the due date will be announced. Each quiz will be worth approximately 10-20 points. Quizzes will be worth 10% of the total course grade.

TESTS: Tests will be given approximately every two chapters. Dates for the tests will be announced in class. Tests will be graded out of 100 points each. Up to 10% of the material may include material from previous chapters. Tests are worth 70% of the total test grade, including the final exam.

FINAL EXAM: A comprehensive final exam covering the entire semester will be taken during final exam week. The final exam grade will be recorded twice and therefore is weighted as two tests in the test category (200 points).

LAB REPORTS: Lab reports will be due on the Monday following the lab on Wednesday of the previous week. Labs cannot be made up, so attendance is very important. Most lab reports can be completed during the lab period.

EXTRA CREDIT: There is no such thing as extra credit. There is only credit. Do not ask about extra credit. This syllabus describes how you are to earn credit. Dedicate your time and energy to studying and developing the knowledge and skills necessary to be successful at the course objectives.

Each assignment will be graded out of points.

The types of assignments will contribute to the final course grade as follows:

Quizzes/Other	10 %
Tests	70 %
Lab Reports	20 %

Grades will be assigned according to the following scale:

90% to 100%	=	4.0
85% to 89%	=	3.5
80% to 84%	=	3.0
75% to 79%	=	2.5
70% to 74%	=	2.0
65% to 69%	=	1.5
60% to 64%	=	1.0
0% to 59%	=	0.0

9. ETHICS POLICY

Consistent with JC policy, academic dishonesty such as cheating, plagiarism etc, will not be tolerated. A first offense of academic dishonesty will result in a zero grade for the experience. A second offense will result in a zero for the course. All cases of academic dishonesty will be documented and forwarded to the Academic Dean. Students involved in disruptive behavior or dishonest scholarly practices will be dealt with in accordance to the Student Handbook.

Student behavior that is detrimental to an environment conducive to learning or the maintenance of a reasonable level of order on campus or in the classroom shall be considered disruptive conduct. Further, students exhibiting behaviors that may cause injury to themselves or others can result in removal from this course.

Academic dishonesty includes, but is not necessarily limited to taking, using, or copying another's work and submitting it as one's own, using notes on Tests or Quizzes, intentionally falsifying information or taking another's ideas with the intention of passing of ideas in class as one's own.

No use of cell phones is allowed in class.

10. AVAILABLE ASSISTANCE

If you have documented disability, make sure that you make me aware ASAP so that suitable arrangements may be made. If you are experiencing difficulties with any aspect of this course, it is best if you consult the instructor. Tutoring assistance is also available. Contact Kylie Welling in Academic Support Services for more information on tutoring, study groups, accommodations for disabilities, or any other related concerns.

11. STUDENT WORK

All Quizzes, Homework Assignments, Tests and Lab Reports will be graded and returned on a timely basis. The final exam will not be returned.

12. SYLLABUS REVISION/INSTRUCTOR PREROGATIVE

All schedules and policies contained in this document are tentative and are subject to revision at the instructor's discretion with timely notice.

13. INCOMPLETES

Consistent with JC policy, an incomplete grade will only be issued if the student has completed the vast majority of the course, is already passing the course after the withdraw deadline, and is unable to complete the course due to an extenuating circumstance. If a grade of incomplete is issued, all grades/scores earned to that date will be used in calculating the course grade.

14. WITHDRAW

The last day to withdraw from a class for Fall 2016 is September 16th.

Schedule

WEEK	Dates	Chapter	Lecture Topics	Laboratory
1	9/5-9/8	1	No Class 9/5 Labor Day Holiday Chemistry and Measurements	Lab Safety Density and Graphing
2	9/12-9/15	2	Energy and Matter	Specific Heat of a Metal
3	9/19-9/22	3	Test 1-Sept. 19th (Chapters 1 & 2) Atoms and Elements	States of Matter and Phase Changes
4	9/26-9/29	3	Atoms and Elements	Emission Spectra and Energy Levels
5	10/3-10/6	4	Nuclear Chemistry	Radioactivity
6	10/10-10/13	5	Test 2-October 10th (Chapters 3 & 4) Compounds and Their Bonds	Nomenclature and Molecular Models
7	10/17-10/20	5	Compounds and Their Bonds	Molecular Models of Organic Compounds
8	10/24-10/27	11 & 12	Intro to Organic Chem Alkenes, Alkynes and Aromatic Compounds	TLC of Analgesic Tablets
9	10/31-11/3	6	Test 3- October 31st (Chapters 5, 11, & 12) Chemical Reactions and Quantities	Chemical Reactions and Equations
10	11/7-11/10	6	Chemical Reactions and Quantities	Stoichiometry: The Formula of a Hydrate
11	11/14-11/17	7	Gases	Molar Mass of Butane
12	11/21-11/24	--	Test 4-November 21st (Chapters 6 & 7) No Classes 11/23-11/24 Thanksgiving Break	No Lab Scheduled
13	11/28-12/1	8	Solutions	Hardness of Water
14	12/5-12/8	9 & 10	Reaction Rates and Equilibrium Acids and Bases	Kinetics
15	12/12-12/16	--	Test 5-December 12th (Chapters 8, 9 & 10) Review for Final Exam	Acids Bases Salts and Buffers
16	12/19-12/22		Final Exam	No Lab Scheduled

The above schedule is tentative and subject to change at the instructor's discretion with timely notice.

Learning Contract – Chem 131 Fall 2016

I have read the Chem 131 course information packet (course information, policies and calendar). I understand the information they contain. However, I would like public/private clarification (circle one) on the items I have described below:

I have also carefully read the lab safety rules and release of liability and acknowledge full responsibility for any risk associated with participation in the lab activities, including those that are not fully known or readily apparent. I agree to indemnify and hold harmless Jackson College for any loss, liability, damage, or costs that may occur as a result of my negligent or intentional act or omission while participating in this course. Additionally, I understand that I may be forbidden from participating in the lab session and/or future lab courses if I violate any safety rule or procedure.

I have had sufficient time to seek explanations of the provisions of the lab safety rules and after careful consideration I sign this document voluntarily and without any inducement.

Print Name _____

Signature _____

****This sheet must be returned no later than one week from when it was distributed****