

VALDOSTA STATE UNIVERSITY CHEMISTRY DEPARTMENT
SYLLABUS FOR 1211L

Fall 2007

Course Prefix and Number: CHEM 1211: Principles of Chemistry Lab I

Contact/Credit: three hours laboratory / one credit hour

Catalog Course Description: This course is a laboratory to accompany CHEM-1211. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHEM-1211.

Prerequisites: Math 1111 or Math 1113

Co-requisites: CHEM-1211

Class Location: Bailey Science Center
Room Number:

Class Times/Days:

Instructor:

Telephone Number:

e-mail address:

Office location: Bailey Science Center
Room Number:

Office Hrs./Days:

Laboratory Website: <http://www.valdosta.edu/chemistry/chemlab>

Required Lab Manuals : Laboratory Manual For CHEM 1211K. 6th ed.,

Additional required Materials: Calculator, Paper towels, Safety goggles, computer storage devices.

* Paper towels and safety goggles can be purchased in the stockroom.

Student Outcomes : Upon successful completion of this course, the student will be able to

- 1- Perform laboratory measurements utilizing metric tools and units;
- 2- Characterize physical and chemical changes of matter;
- 3- Perform simple chemical separations and analyses;
- 4- Identify parameters for solution formation;
- 5- Classify chemical reactions;
- 6- Synthesize compounds;
- 7- Participate as part of a team to complete lab assignments

Methodology: lecture/discussion/experimentation/demonstrations

Course Requirements:

- 1- Laboratory Quizzes: Administered after the lab lecture
- 2- Laboratory Reports: Approximately fourteen (14) laboratory exercises will be required.
- 3- Prelaboratory Assignments
- 4- Final Exam: counts as one lab report

Evaluation of Performance:

10% = Lecture Lab Quiz

10 % = Prelaboratory assignment

80% = Laboratory based on lab report sheets (questions, calculations, etc.)

College Grading Scale:

Grade Explanation	Numerical pts.	Quality pts./credit hrs.
A	90 - above	4.0
B	80 - 89	3.0
C	70 - 79	2.0
D	60 - 69	1.0
F	below 60	0.0

Quality of Instruction Statement : The VSU faculty members are committed to providing quality instruction. If there is a concern about the instruction provided, treatment of an individual or group of students, or professional conduct of instructors, consult either the faculty member, department chair or division chair.

Disability Access Statement: If a student has a disability that may affect his/her academic performance, and is seeking accommodations, it is the student's responsibility to discuss this need with the instructor after contacting the Disability Access Office at 245-2498, within the first two weeks of class.

College Attendance Policy:

Regular attendance in class is essential to receiving maximum benefit from the educational experience. Laboratory attendance is mandatory for the lecture lab and lab. Please refer to student expectations for penalty for missed labs.

Special Note: There will **NOT** be any make up for unexcused missed quizzes and laboratory exercises.

Expectations of Students Enrolled in CHM 1211 Lab

- 1) All safety rules **MUST** be followed. Failure to do so can result in dismissal from the lab and a grade of zero for the given experiment.
- 2) Students must wear appropriate eye protection at all times while in the laboratory. Failure to do so will result in being ejected from the lab and receiving a grade of "0" for the lab.
- 3) Students are expected to come to class on time. If students are more than 15 minutes late for a lab session, they will not be allowed to perform the experiment at that time; however, the lab may be made up in another session with the documented permission of instructor(s).
- 4) Pre-lab assignments are due at the beginning of the lab period, unless otherwise specified by the instructor. Lab reports are due the following week after experimentation (at the beginning of the lab period). Failure to submit the lab report from the previous lab will result in a loss of 80% of the lab grade.
- 5) Students are to take a **PRE-LAB quiz** for the given experiment before starting the laboratory exercise. This quiz will be administered during the lab lecture.
- 6) Students are encouraged to attend other laboratory sessions to make up excused missed lab work. If the student fails to make up the lab in other sessions, a grade of zero will be entered for the student. If the make-up is to be performed in a different laboratory session, students must have permission in advance from both instructors. Make-up labs are permitted only during the same week of the specific experiment.

- 7) The penalty for the first missed unexcused lab is a grade of "0". The penalty for the second missed unexcused lab is a grade of "0" and a drop of one letter grade. The third missed unexcused lab will result in failure of the course.
- 8) In order to receive credit for each lab, students must attend the lab, perform the lab work, and submit a lab report. "Dry labbing" which is either not attending the lab, and handing in a report or not doing the lab work but handing in the report will result in failure for the course.
- 9) Students are expected to work alone unless directed by the instructor to work in teams to complete the laboratory exercises. Laboratory quizzes, pre-labs, and reports will be done individually and each student will submit a report.

• **Course Outline:** (subject to revision)

Week of	Experiment #
August 13	Safety/ Check-In
August 20	Exp. # 1 : Physical Properties
August 27	Exp. # 2 : Separation of a Mixture
September 3	Exp. # 3: Nomenclature Handout
September 10	Exp. # 4: Formula of a Hydrate
September 17	Exp. # 5 : Some Reactions of Copper
September 24	Exp. # 6: Synthesis of an Alum-KAl(SO ₄) ₂ .12H ₂ O
October 1	Exp. # 7 : Spectroscopy
October 8	Exp. # 8 : Six Bottles Experiment.
October 15	FALL BREAK
October 22	Exp. # 9: Specific Heat of a Metal
October 29	Exp. # 12: An Investigation of Boyle's Law
November 5	Exp. # 13: Aluminum Analysis
November 12	Exp. # 14: Determination of Molar Mass
November 19	NO LABS: Thanksgiving Break
November 26	Exp. # 11: Handout : Molecular Geometry
December 3	Final Exam