Midland College
Syllabus
2008-2009
CHEM 1411 Lab
General Inorganic Chemistry Lab
4 Semester Credit Hours
(3 Lecture/4 Lab)

Course Description:
This course in chemistry laboratory will enable students to become proficient in stoichiometry, chemical equations, calorimetry, nomenclature, reactions, liquids, solids and solutions. Knowledge of algebra is needed.

Text, References, & Supplies:


A scientific calculator is needed for this course. Each student must furnish their scan-trons, ink pen, and laboratory apron (optional).

Safety:
In addition to the above supplies, students are responsible for the following safety equipment:
1) Close-toed shoes.
2) Sleeved shirt that covers midriff (or lab coat).
3) Pants.
4) ACS regulation safety goggles (Contacts are STRONGLY DISCOURAGED).
If any one of these items is not present, the student will not be allowed to participate in the experiment.

Also, the following guidelines are to be followed at all times:
1) No open food or drink containers.
2) Safety equipment stays in place from the start of an experiment until the last person has finished the experiment.
3) No horseplay.
Gross violation of safety conduct that severely jeopardizes the health and well-being of any individuals will result in an automatic failure of the laboratory course.

Course Goals/Objectives:
Understand the scientific method pertaining to chemistry. Recognize and account for experimental error in scientific experiments. Learn to apply chemical theories and research to everyday phenomena. Understand how chemistry is a service science. Observe physical and chemical phenomena and relate it to current scientific theory. Learn methods of preparing, separating, and identifying chemical compounds.
Evaluation of Students:
The laboratory is valued as 25% of the overall grade in Chemistry 1411. There are no make-up labs this semester. During the semester 12 labs will be performed. **Only the best 10 of 12 grades will be counted in calculating the final average.** If for some reason, you must miss an experiment, a zero will be assigned and will count as one of your dropped grades. If you miss two experiments, both zero’s will be dropped, but the rest of your grades will count in your average. If you miss three experiments, two will be dropped, one will enter the grade book as a zero, and grades will be averaged accordingly, etc.

Students are expected to attend laboratory class regularly and participate in the laboratory exercise. Excessive absences are discouraged due to the nature of the course. Attendance will be assessed each lab day. Assignments are due the following week at the beginning of class.

Student Contributions and Class Policies:
Assignments turned in late will receive a 5 pt per day penalty.

Midland College does not tolerate scholastic dishonesty or academic misconduct in any form. Please read the MC Student Handbook on this subject.

Course Schedule:
See Attached Schedule.

Intellectual Competencies:
1. Reading - Understanding the material incorporated in the text used in this course will require the student to analyze and interpret various chemical concepts.

2. Listening - The primary teaching methods used in this course are discussion and lecture. Understanding the oral presentation of material will require the student to analyze and interpret various chemical concepts.

3. Critical Thinking- Critical thinking, as exemplified by problem solving, is inherent in the study of any scientific discipline. Chemical problems will be considered, discussed, and analyzed in this course.

ADA Statement:
Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact the instructor as soon as possible. These conditions may include documented physical or educational disabilities. Please be aware that services or accommodations are not automatic. Each student must request them and secure the proper authorizations.
Exemplary Objectives:

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Competencies:

1. To understand and apply method and appropriate technology to the study of the natural sciences.

2. To recognize scientific and quantitative methods and the differences between these approaches and the other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.

3. To identify and recognize the differences among competing scientific theories.

4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.

5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

Instructor Information:

Instructor:
Office:
Phone:
E-mail:
Office Hours:

Division Dean: Dr. Margaret Wade, 125 SF, 685-4615
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