MDC Homestead Campus
Arts & Sciences Department

CHEMISTRY 1046 LABORATORY

SYLLABUS

General Information

CHM 1046L is the laboratory portion of CHM 1046. Lecture (1046) and Laboratory (1046L) are co-requisites; students must either be enrolled in both courses concurrently or have already successfully completed the lecture portion of the course. Students are required to keep a laboratory notebook. All laboratory notebook entries must strictly conform to the format set forth by your instructor. This format will be explained during the first lab meeting. Lab notebooks will be checked periodically by the instructor.

Text Book

Lab Experiments: General Chemistry, 11th ed., '06, by Pappas

Students are required to **read** the assigned laboratory exercise(s) in the lab manual **before** attending class.

Attendance and Tardiness

Attendance is REQUIRED. Any student who misses a scheduled laboratory session will be required to withdraw from the course. If the student does not withdraw he/she will automatically fail the course.

Any student arriving to class more than five minutes late will not be allowed to enter and will be considered absent.

Make-up Policy

There will be NO MAKE-UP EXAMS, except under extenuating circumstances as determined by the instructor; documentation is required. It is the student's responsibility to contact the instructor in this regard. There will be absolutely NO MAKE-UP LABS.

Scientific Notebook

Students must keep a scientific notebook (carbonless copy style, purchased in bookstore). Instructions on how to keep a scientific notebook are found in *Appendix I* of the lab manual. The scientific notebook grade will be based on the quality of the notebook's contents.

Lab Reports

A lab report must be submitted for each laboratory exercise. Lab reports should:

- be accurate, correct, complete and neat
- include calculations and setups
- use significant figures
- be turned in at the beginning of the next scheduled lab period

Performance Evaluation

Students will be assigned a grade based on their performance in the lab. The instructor's grade will be based on the student's ability to follow instructions. Students are expected to:

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- follow all safety precautions (*General Safety Rules* can be found on pages vii – x in the lab manual)
- always wear safety goggles
- arrive to lab on time
- read the assigned laboratory exercise(s) in the lab manual before attending class
- clean and return all glassware/equipment to its proper place at the end of the experiment
- clean your work area

Grading Policy

Final course grades will be determined based upon the students' performance on **exams**, **lab reports, scientific notebook** entries, and the instructor's **performance evaluation**. The point distribution will be as follows:

Task	**Points**
Performance Evaluation	50
Scientific Notebook	
Analysis of Soda Ash (Exp. 14)	5
Freezing Point Lowering (Exp. 11)	5
Thermodynamics (Exp. 3)	5
Cation Analysis (Exp. 16)	10
Qualitative Analysis of an Unknown Salt (Exp. 18)	5
Chemical Equilibrium (Exp. 19)	5
Equilibrium Constant of a Weak Acid (Exp. 20)	5
Lab Reports	
Analysis of Soda Ash (Exp. 14)	50
Freezing Point Lowering (Exp. 11)	25
Thermodynamics (Exp. 3)	25
Cation Analysis(Exp. 16)	96
Hexacation Analysis (Exp. 17)	40
Qualitative Analysis of an Unknown Salt (Exp. 18)	30
Chemical Equilibrium (Exp. 19)	25
Equilibrium Constant of a Weak Acid (Exp. 20)	25
Exams	
Exam 1 (Exp. 14 and 11)	100
Exam 2 (Exp. 3 and 16)	100
Exam 3 (Exp. 17, 18, 19, 20)	100
Total Points	**706**

Letter Grade	Percent	Points Needed
A	88% - 100%	621
B	78% - 87%	551
C	65% - 77%	459
D	46% - 64%	325
F	0% - 45%	less than 325

Academic Dishonesty Policy:

See Miami Dade College Students Rights and Responsibilities PROCEDURE 4035.

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SCHEDULE

Week	Topic	Experiment
1	Course Intro. & Lab Safety	
2	Analysis of Soda Ash	14
3	Analysis of Soda Ash (continued)	14
4	Freezing Point Lowering	11
5	**EXAM 1 (Exp. 14 and 11)** Thermodynamics: Enthalpy of Neutralization/Calorimetry	 3
6	Cation Analysis	16 (also read Appendix IV)
7	Cation Analysis	16 (also read Appendix IV)
8	Cation Analysis	16 (also read Appendix IV)
9	Cation Analysis	16 (also read Appendix IV)
10	Cation Analysis	16 (also read Appendix IV)
11	**EXAM 2 (Exp. 3 and 16)** Hexacation Analysis	 17
12	Qualitative Analysis of an Unknown Salt	18
13	Chemical Equilibrium	19
14	Equilibrium Constant of a Weak Acid	20
15	**EXAM 2 (Exp. 17, 18, 19, 20)** Checkout	