American University of Beirut

Faculty of Arts and Sciences
Department of Chemistry

Chemistry 201L

Spring 2017

Lecturer	Lab Manager	Lab Instructors
Dr. Pierre Karam Room 426 Chem. Email:pk03@aub.edu.lb Office hours: or by appointment only	Mrs. Lara Abramian Room 208 Chem. Ext. 3977 Email: la30@aub.edu.lb	To be announced.

Course Learning Outcomes:

Students who successfully complete this course will be able to:

- Prepare professional scientific reports.
- Consolidate lab data into a condensed graphical form.
- Prepare samples and standards for analysis.
- Apply stoichiometric calculations to a variety of different chemical reactions.
- Apply the principles of equilibrium in calculations involving, acids-bases, soluble ionic compounds etc.
- Use titration data from the lab to calculate the pH of a resulting solution.
- Operate Scientific Instruments.
- Use a linear calibration curve to calculate concentration.
- Describe the various spectrochemical techniques as described within the course.
- Use sample data obtained from spectrochemical techniques to calculate unknown concentrations or obtain structural information where applicable.
- Develop team work to divide project duties ensuring efficiency and quality of the final results.

CLASS SCHEDULE

Section	CRN	Main Lecture	Lab Lecture	Lab
1				
2				

COURSE DETAILS

☞ **Course Description:**

This course is designed to provide chemistry students with the technical background to conduct experiments in the field of analytical, inorganic, physical and organic chemistry.

☞ **Grading Scheme:** (course + laboratory)

Safety Exam*	**5%**
Participation	**5%**
TA Evaluation	**10%**
IBDAA	**15%**
Lab Reports	**65%**

- Students will lose 5% every time they fail the exam from their final course grade.

Lab Outline:

Lab Lecture	Exp #	Experiment Title	Tuesday	Thursday
Jan-30	Safety Lecture	Safety Lecture		
Feb-06	Exp 1	Measuring the Density of Water	Feb-7	Feb-9
Feb-13	Exp2	Preparation of Primary Standard Solutions and Standardization of Acid and Base solutions	Feb-14	Feb-16
Feb-20	Exp3	Analysis of a Mixture of Carbonate and Bicarbonate in Water	Feb-21	Feb-23
Mar-06	Exp 4	Spectrophotometry	Mar-7	Mar-9
Mar-13	Exp 5	Study of an Organic Acid	Mar-14	Mar-16
Mar-20	Exp 6	Distillation	Mar-21	Mar-23
Mar-27	Exp 7	Recrystallization	Mar-28	Mar-30
Apr-03	Exp 8	Chromatography	Apr-4	Apr-6
Apr-10	Exp 9	Isoamyl Acetate	Apr-11	Apr-13
		Check out		

Special Needs:
If you have documented special needs and anticipate difficulties with the content or format of the course due to a physical or learning disability, please contact me and/or your academic advisor, as well as the Counseling Center in the Office of Student Affairs (Ext. 3196), as soon as possible to discuss options for accommodations. Those seeking accommodations must submit the Special Needs Support Request Form along with the required documentation.

GUIDELINES

Missing a Lab

- In case of absence for reasons beyond control, a **valid excuse** should be submitted to your Professor as soon as possible.

Academic Integrity and Student's Responsibility:

- Dishonesty of any kind will not be tolerated in this course. Cheating is a violation of the University's academic regulations and is subject to disciplinary action.
- Cheating on exams and/or copying of assignments will result in a grade of zero for that exam/assignment.
- Students should familiarize themselves with the details of the University's Student Code-of-Conduct as published in the annual Student Handbook.
- Students are held responsible for all announcements in class and on Moodle, whether they are present or absent for that day.