

# Syllabus for Chem 212, Quantitative Analysis Spring Semester 2015

**Quantitative Analysis**, 3 credit hours;

Lecture: MWF 8:15 -9:10am Dumbach 119 Discussion: Mo 11:30-12:20pm Dumbach 122

Prerequisite: Chem 106 or 102 and 112 and Chem 222 or Chem 224 and Chem 226 or permission of the instructor.

**Instructor:** Dr. Conrad Naleway,

Flanner Hall 200C, Phone 773-508-3115

E-mail: cnalewa@luc.edu.

Office hours: WF 9:30-10:30 am plus always by appointment and weekly review session (tba)

**Textbook:** "Exploring Chemical Analysis" (4<sup>th</sup> or 5<sup>th</sup> edition), by Daniel C. Harris ISBN 1- 4292-1004-4

**Other Materials:** You will need an inexpensive calculator having logarithmic (base 10 and base e), exponential, and trigonometric functions. Be sure you are familiar with your calculator and that it is in user-ready condition for quizzes and exams. Calculators cannot be shared during exams

## **Objectives**

- 1) To teach fundamental aspects of acid/base chemistry, redox, chemistry, electrochemistry, and ionic equilibria.
- 2) To acquaint the student with some of the fundamental techniques and state-of-the-art applications of chemical quantitative analysis used in biomedical, forensic, and environmental chemistry.

**Final Grade** will be determined by :

Class Comparative Participation during Lecture (5%)

Discussion Group Problem Sets (15%)

Plus Exam Grade (80% total): Top 3 of 4 in class exams (20% each) plus final exam (20%)

## **Final Grading Scale:**

A 100-93;

B- 80-77;

D 64-55;

A- 92-89;

C+ 76-73;

F <55.

B+ 88-85;

C 72-69;

B 84-81;

C- 68-65;

**Discussions:** Groups will work through problem sets and a single collective answer sheet will be submitted for grading.

Quiz and Exam Problems will be largely variants of problems done in class or problems done in discussion period! Plus there also may be a few conceptual questions on each Exam/Quiz

All exams must be signed in the front, upper right hand corner. This signature will be taken as a statement of honest and completely independent work. There will be no tolerance whatsoever for cheating or plagiarism. Simply, *any instance of dishonesty (including those detailed on the website provided above or in this syllabus) during exams will result in a failing grade for the course.* The Dean of Arts & Sciences and The Chair of The Department of Chemistry will also be notified. I truly hope to never have to invoke these processes. Please be honest with your work. Instances of academic dishonesty will warrant immediate failure of the course plus referral to the Dean's office. For more information on university policy, please read:

[http://www.luc.edu/academics/catalog/undergrad/reg\\_academicintegrity.shtml](http://www.luc.edu/academics/catalog/undergrad/reg_academicintegrity.shtml)

Exams will be graded and returned as soon as possible, usually the next class period. ALL grading questions, points of clarification and grading errors must be brought to the instructor's attention during office hours **no later than one week after exam is returned.** There will be no exceptions to this rule! Each returned exam must be copied with original being

returned to instructor with a hand written note stapled to exam addressing concern(s). *Only exams completed in INK are eligible for possible regarding.*

**There will be no make-up quizzes, or exams given unless extreme and documented circumstances might occur.**

**Students with Disabilities :** If you have any special needs, please let me know in the first week of classes. The university provides services for students with disabilities. Any student who would like to use any of these university services should contact the Services for Students with Disabilities (SSWD), Sullivan Center (773) 508- 3700. Further information is available at <http://www.luc.edu/sswd>

**Tutoring:** The Loyola Undergraduate ACS has open tutoring every week on W and R evenings in Flanner 129. In addition, Loyola maintains a Center for Academic Excellence & Tutoring (<http://www.luc.edu/tutoring>) Again, this is a service included in your tuition, so I encourage you to utilize their assistance.