

CHEM 385 and 465
Advanced Enzymology
Dr. M. A. Ballicora
Spring, 2013
Mondays and Wednesdays 5:30pm-6:45pm Cuneo Hall-104

Tentative Lecture Schedule:

14-Jan		Introduction	1
16-Jan		Enzyme assays	2
21-Jan	MLK day		
23-Jan		Enzyme assays	3
28-Jan		Steady State and Equilibrium	4
30-Jan		Steady State and Equilibrium	5
4-Feb		Derivation of Equations	6
6-Feb		Derivation of Equations	7
11-Feb		Inhibition	8
13-Feb		Hysteretic Enzymes	9
18-Feb		Review	10
20-Feb		TEST	11
25-Feb		Substrate Channeling	12
27-Feb		Allosterism	13
4-Mar	Spring Break		
6-Mar	Spring Break		
11-Mar		Allosterism	14
13-Mar		Reaction Mechanisms	15
18-Mar		Reaction Mechanisms	16
25-Mar		Reaction Mechanisms	17
27-Mar		Catalytic Antibodies	18
1-Apr		TEST	19
3-Apr		Statistical Treatment	20
8-Apr		Statistical Treatment	21
10-Apr		Enzyme engineering	22
15-Apr		Enzymes and Drug Discovery	23
17-Apr		Special topics	24
22-Apr		Special topics	25
24-Apr		Review	26
29-Apr	Final exam	5:30pm-6:45pm	

Major Themes:

The major themes in this course will be the about topics that are related to modern enzymology, with a special emphasis on enzyme kinetics. The structure of the course will involve lectures by Dr. Ballicora for each topic, intermixed with class discussion. Since this is an advanced course, the instructor may slightly adjust the topics presented to better accommodate the student needs.

Library Assignments:

There is no official textbook in this course. Most of it will be based on current papers, reviews, and excerpts from different books. The instructors will provide handouts or references when needed. **The material covered in class will not be easily be covered in the same manner anywhere else, so it is critical to have perfect or near perfect attendance.**

Grading:

First examination	25%
Second examination	25%
Participation and Discussion	5%
Assignments	20%
Final examination	25%

No make-up mid-term examinations will be given. In the event of a missed first or second examination due to a documented medical or family emergency, the score on the final examination, corrected by the ratio of the class averages on the two examinations, will determine the missed examination score.

Late assignments may have a 5% deduction in the grading for each day that is turn in late.

Blackboard and email

Students are supposed to check their Loyola mail regularly as well the blackboard system (blackboard.luc.edu). The instructor will communicate with the students through those.

Expected behavior

Dishonest behavior such as cheating may cause to fail an assignment or examination. Cell phones or any other distracting devices are not allowed in class. Please turn them off or this may cause a point deduction in the participation. In the exams, students are not allowed to use any sort of electronic device (cell phones, iPods, radios, calculators etc.) unless they are specifically authorized by the instructor.

Instructor:

Dr. Miguel A. Ballicora

FH-405

Phone: 508-3154

e-mail: mballic@luc.edu

Office hours: Monday & Wednesday 3:30 pm to 4:30 pm or by appointment (e-mail or phone me – be sure that you get a confirmation)

Website: The URL is blackboard.luc.edu.