

Chemistry 395 and 465
Advanced Enzymology
Dr. M. A. Ballicora
Spring, 2006
Mondays and Wednesdays 7:00pm-8:20pm FH-105

Tentative Lecture Schedule:

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

3-May Final exam 7 pm – 8:20 pm

Major Themes:

The major themes in this course will be the about topics that are related to modern enzymology. The structure of the course will involve lectures by Dr. Ballicora for each topic, with discussion with the students. Since this is graduate student 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.

Grading:

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

No make-up 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. A similar procedure will be done for a missed final examination, always due to a documented medical or family emergency.

Late assignments will 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

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Office hours: Wednesday 9:45 am to 11:15 am or by appointment (e-mail or phone me – be sure that you get a confirmation)

Website: The website will be on Blackboard system. The URL is blackboard.luc.edu.