

Naohiro Kato August 21, 2006

SYLLABUS-BIOLOGY 3090 Section 3 (Fall 2006)

Call number: 6844, **Course number:** BIOL 3090, **Section number:** 3, **Course title:** Cell Biology
Credit hours: 3, **Time:** 12:10 pm -01:30 pm, **Days:** Tuesday & Thursday, **Room:** 0100 Dodson

Instructor: Naohiro Kato

Assistant Professor, Department of Biological Sciences, LSU

Office: Room 226, Life Sciences Building, LSU, Baton Rouge, LA

Office Hours: By appointment

Email: kato@LSU.edu

Website: http://www.biology.lsu.edu/faculty_listings/fac_pages/nkato.html

Contact Policy: Email is recommended.

Course Objective:

The objective of this class is to understand the structures and functions of cells at molecular levels. By the end of the course, you should gain the knowledge necessary to take upper level classes of molecular and cell biology.

Textbook:

Lodish *et al.*, *Molecular Cell Biology*, 5th edition. Published by W.H. Freeman and Company (NY), ISBN 0-7167-4366-3

Website:

<http://bcs.whfreeman.com/lodish5e>

<http://blackboard.lsu.edu> BIOL3090 for Naohiro Kato

Grading:

The final grade is cumulative and is based on a total of 600 points (450 exam points + 150 daily quiz points). The homework credit points you obtain (max 50 points) could help your grade be upgraded. See the homework credit section below for the details.

A: Above 540 points

B: 480 – 539 points

C: 420 – 479 points

D: 360 - 419 points

F: Below 359 points

Examinations - the quarterly examinations- (total 450 points):

Four exams will be given in class. The exams will have a combination of multiple choice, True/False, and matching, and may include short essays. **Each exam** will be worth **100 points** and **include material covered since the previous exam**. **The final exam** will have an **additional 50 points** in which questions are **drawn upon material throughout the course**.

Make-up Exam:

The make-up exam will be given only when an official documentation is provided that clearly indicates circumstances beyond a student's control. A note from a friend or family member is not acceptable documentation. By providing an acceptable written explanation **prior** to missing the exam, a student may be able to obtain an approval for the make-up from the instructor.

Daily Quizzes (total 150 points):

A daily quiz composed with a single question will be given in class. By filling in the answering sheet you will be considered "in attendance" for class that day. (6 points for correctly answered students, 4 points for not correctly answered students.)

Homework credit: (maximum 36 points):

1) Before the lecture, you can **submit pre-study notes made with Microsoft Office**. Sections of the textbook covered in each lecture are posted on the blackboard (<http://blackboard.lsu.edu>). You read the sections and create notes that are covered on the lecture day. **The deadline of pre-study notes will be 12:00 am of the lecture day.**

2) After the lecture, you can **submit one sample of a multiple-choices question** that can be used for the quarterly examinations. The sample questions must be based on the lecture given. **The questions must be submitted with the answers and the explanations.** The explanations of the answers must be from the textbook (the page references must be attached). **The deadline of the question will be 12:00 am of the following lecture day.** The questions and pre-study notes you created will be posted on the blackboard (<http://blackboard.lsu.edu>) so that other students can use them for their study. More details are explained in the document, "Homework Credit".

Course Legal Statements:

Dropping the course:

The finale day of the dropping the course is November 10, 2006. A student may withdraw from the class on and before September 5, 2006 without receiving a grade of "W".

Equal Opportunity:

All qualified students have equal opportunity in class without regard to race, creed, color, marital status, sexual orientation, religion, sex, national origin, age, or veteran's status.

Disabilities:

A student having learning disabilities should consult the instructor and Office of Disability Services (<http://appl003.ocs.lsu.edu/slas/ods.nsf/TextOnly>).

Academic Integrity and Civility:

Code of Student Conduct issued by the Office of the Chancellor

([http://appl003.lsu.edu/slas/judicialaffairs.nsf/\\$Content/Code+of+Student+Conduct?OpenDocument#5.1](http://appl003.lsu.edu/slas/judicialaffairs.nsf/$Content/Code+of+Student+Conduct?OpenDocument#5.1)) will be applied.

Memo:

Fall Semester 2006, BIOL3090 Section 2 Tentative Schedule

Date	Class	Chapter	Title	Pages
August 29, 2006	Tuesday Class 1	-	Orientation	
August 31, 2006	Thursday Class 2	1	Life Begins with Cells	p1 - p28
September 5, 2006	Tuesday Class 3	3	Protein Structure and Function	p59 - p99
September 7, 2006	Thursday Class 4	4	Basic Molecular Genetic Mechanisms	p101 - p145
September 12, 2006	Tuesday Class 5	5	Biomembranes and Cell Architecture	p147 - p196
September 14, 2006	Thursday Class 6	2	Chemical Foundations	p29 - p57
September 19, 2006	Tuesday Class 7	TBA		
September 21, 2006	Thursday 1st-Q Exam		good luck	
September 26, 2006	Tuesday Class 8	8	Cellular Energetic	p301 - p359
September 28, 2006	Thursday Class 9	9	Molecular Genetic Techniques and Genomics	p351 - p403
October 3, 2006	Tuesday Class 10	10	Molecular Structure of Genes and Chromosomes	p405 - p445
October 5, 2006	Thursday Fall holiday	no class		
October 10, 2006	Tuesday Class 11	11	Transcriptional Control of Gene Expression	p447 - p491
October 12, 2006	Thursday Class 12	12	Post-transcriptional Gene Control and Nuclear Transport	p493 - p531
October 17, 2006	Tuesday Class 13	TBA		
October 19, 2006	Thursday Mid-Semester Exam		good luck	
October 24, 2006	Tuesday Class 14	TBA		
October 26, 2006	Thursday Class 15	13	Signaling at the Cell Surface	p533 - p570
October 31, 2006	Tuesday Class 16	14	Signaling Pathways That Control Gene Activity	p571 - p610
November 2, 2006	Thursday Class 17	16	Moving Proteins into Membranes and Organelles	p657 - p699
November 7, 2006	Tuesday Class 18	17	Vesicular Traffic, Secretion, and Endocytosis	p701 - p724
November 9, 2006	Thursday Class 19	TBA		
November 14, 2006	Tuesday 3rd-Q Exam		good luck	
November 16, 2006	Thursday Class 20	19	Microfilaments and Intermediate Filaments	p779 - p815
November 21, 2006	Tuesday Class 21	21	Regulating the Eukaryotic Cell Cycle I	p853 - p897
November 23, 2006	Thursday Thanks giving	no Class		
November 28, 2006	Tuesday Class 22	21	Regulating the Eukaryotic Cell Cycle II	p853 - p897
November 30, 2006	Thursday Class 23	23	Cancer	p935 - p973
December 5, 2006	Tuesday Class 24	TBA		
December 7, 2006	Thursday Final Exam		good luck	
December 12, 2006	Tuesday			