BIO 3302: EUKARYOTIC MOLECULAR & CELL BIOLOGY

The University of Texas at Dallas

Fall, 2015

TEXT: Lodish *et al*., ***Molecular Cell Biology***, Seventh Edition, 2013 (ISBN 13: 978-1-4292-3413-9)
Or: Sixth Edition, 2008 (ISBN 0-7167-7601-4)

CLASS HOURS: Tuesday and Thursday, 10:00 -11:15 am, **FN 2.102 (Polykarp Kush Auditorium)**

Dr. Uma Srikanth: *Office:* FN3.114 *Hours:* Wednesday 10:30 – 11:30 AM
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Dr. Jing Pan: *Office:* FN3.208 *Hours:* TBA
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Course Materials

Course material and grades will be posted on **eLearning**.

TAs for workshops (BIO 3102)[1]:

Section #	Time/Location	TA
3102-005	Fri 1:00- 1:50pm/ FO3.222	Steven Mao
3102-006	Fri 1:00- 1:50pm/ FN2.106	Michael Neugent
3102-007	Mon 1:00- 1:50pm/ FN2.106	Michael Lee, Jr.
3102-008	Mon 1:00- 1:50pm/ FO3.222	Luke Joyce
3102-009	Wed 1:00- 1:50pm/ FO3.616	Mehran Golkarparvin

All students enrolled in BIO 3302 must also enroll in a workshop **(BIO 3102).** *The grade for BIO 3102 will be determined by a combination of attendance and homework grades, and it will be worth* ***10%*** *of the overall grade given for BIO 3302. The same letter grade will be assigned for both the lecture and workshop components of the course. Poor performance in the workshop can drop your grade in the lecture part of the course (BIO 3302) from an A to a B, or from a B to a C, etc. The same grade will be assigned for both BIO 3301 and BIO 3302.* ***If you drop the course, you must drop both 3302 and 3102.***

WORKSHOPS BEGIN THE WEEK OF AUGUST 31, 2015.

There will be four exams given in BIO 3302. The exam questions will be a combination of multiple-choice plus brief essay or short-answer questions. Each of the four exams will be worth 22.5% of the final grade, and each will cover all of the material presented in class since the previous exam (lectures, handouts, and assigned reading), for a total of ***90%****. The remaining* ***10%*** *of your grade is from the workshops- homeworks, etc. Scoring on the exams is done by the graduate Teaching Assistants, but the Instructor determines in advance what key points must be included in each answer to get full credit. The Instructor checks your scores after the TA has graded the exams, and assigns letter grades.*

If you have questions about the grading or your performance in an exam, please see the instructors as soon as possible. Although letter grades may be provided after each exam, these should be treated only as a reflection of your relative performance when compared to the rest of the class. ***The final course grade will be based not on these individual letter grades, but on the total of the numeric scores of all four exams and the homework****.*

[1] *All students enrolled in BIO 3302 must also enroll in a workshop (BIO 3102). If for any reason you decide to drop the BIO 3302,* ***you must also drop BIO 3102!***

Make- up EXAMS

These exams will be scheduled on a need only basis. If you are unwell and unable to attend the exam, please email the instructor at the earliest available opportunity. Also, please remember to bring a copy of the doctor's note on the day your make-up exam is scheduled. These exams will be scheduled to the convenience of the teaching assistants (graduate) or the instructor.

***EXAM VIEWING OFFICE HOURS**:*

Instructors will send announcements on elearning about office hours for viewing exams after they have been graded. Please be sure to come and visit the instructor during these hours. If the allotted time is in conflict with your classes, please email instructor in advance for an alternate time. No grade changes will be made three weeks after the date of the exam.

SCHEDULE OF LECTURES

BIO 3302, Fall 2015

Dates	Session	Instructor	Topics	Reading
Tue, Aug 25	1	Srikanth	Introduction & Culturing Cells	Chapter 9
Thur, Aug 27	2	Srikanth	Cell Biology Techniques	Chapter 9
Tue, Sept 1	3	Srikanth	Cell Biology Techniques	Chapter 9
Thur, Sept 3	4	Srikanth	Biomembrane Structure	Chapter 10
Tue, Sept 8	5	Srikanth	Biomembrane Structure	Chapter 10
Thur, Sept 10	6	Srikanth	Transport of Ions and Small Molecules	Chapter 11
Tue, Sept 15	7	Srikanth	Transport of Ions and Small Molecules	Chapter 11
Thur, Sept 17	**8**	**Srikanth**	**EXAM 1 (Chapters parts of 9, 10, and 11)**	
Tue, Sept 22	9	Srikanth	General Principles of Cell Signaling	Chapter 15
Thur, Sept 24	10	Srikanth	G protein coupled Signaling	Chapter 15
Tue, Sept 29 Thur, Oct 1	11,12	Srikanth	G protein coupled Signaling & Signaling pathways that control Gene Expression	Chapters 15 &16
Tue, Oct 6 Thur, Oct 8	13,14	Srikanth	Signaling pathways that control Gene Expression and Review	Chapter 16
Tue. Oct 13	1	Pan	Protein targeting	Chapter 13
Thur Oct 15	**15**	**Srikanth**	**EXAM 2 (Chapters 15, 16)**	
Tue, Oct 20	2	Pan	Protein targeting	Chapter 13
Thur, Oct 22	3	Pan	Protein targeting	Chapter 13
Tue, Oct 27	4	Pan	Vesicular trafficking	Chapter 14
Thur, Oct 29	5	Pan	Vesicular trafficking	Chapter 14
Tue, Nov 3	6	Pan	Vesicular trafficking	Chapter 14
Thur, Nov 5	7	Pan	Actin	Chapter 17
Tue, Nov 10	**8**	**Pan**	**EXAM 3 (Chapters 13, 14, and 17)**	
Thur, Nov 12	9	Pan	Actin	Chapter 17
Tue, Nov 17	10	Pan	Microtubules	Chapter 18
Thur, Nov 19	11	Pan	Microtubules	Chapter 18
Tue, Nov 24			**Fall break**	
Thur, Nov 26			**Fall break**	
Tue, Dec 1	12	Pan	Cell cycle	Chapter 19
Thur, Dec 3	13	Pan	Cell cycle	Chapter 19
Tue, Dec 8	**14**	**Pan**	**EXAM 4 (Chapters 17, 18, 19)**	