### **BIO 6356: 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

Phone: 972-883-6570 Email: ukrish@utdallas.edu

Dr. John Burr Office: Email: burr@utdallas.edu

Phone: Hours:

#### **Course Materials**

Dr. Srikanth's course material and grades will be posted on elearning.

Dr. Burr does not use eLearning; his course information and grades will instead be posted at:

http://www.utdallas.edu/~burr/BIO3302

## **Grading Policy**

The course grade will be based on the average score in four exams given in the course and a short research paper on a topic related to cell biology. Papers (8-15 pages) will be submitted to Dr. Burr as an email Word document attachment no later than Dec 1, 2015. (The paper is graded Pass/Fail.) BIOL 6356 students are not required to turn in homeworks or attend workshops. If you would like to attend workshops, then here is the list of workshop times and days.

## TAs for workshops (BIO 3102)<sup>1</sup>:

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

Graduate TAs' for the course: Chad Smith, Sagar Sohoni, Luke Joyce, Michael Neugent and Amelie Skopp

# 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	<b>EXAM 2 (Chapters 15, 16)</b>	
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	<b>EXAM 3 (Chapters 13, 14, and 17)</b>	
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 Dee 1	12	Pan	Cell cycle	Chapter 19
Tue, Dec 1				
Thur, Dec 3  Tue, Dec 8	13	Pan	Cell cycle	Chapter 19