

FALL 2016

MODERN METHODS IN MOLECULAR AND CELLULAR BIOLOGY, MMED 5015

August 23 to December 13, 2016

Course Director: P. Renee Yew (yew@uthscsa.edu), 261.2 STRF, x2-4150

Meeting day, time, and location:

Tuesdays 9:30-11:00 AM, STRF Room TBD

Course Description: Modern Methods in Molecular and Cell Biology, (MMED 5015), Fall Semester - This course uses didactic lectures to introduce students to the basic experimental techniques and principles used in the study of cell biology, molecular biology, and protein analysis. Semester Credit Hours: 1.0

Grading: Grades will be based on one closed book examination at the end of the course. Exam questions will be in the form of short answer and/or essay questions. Each faculty lecturer will be asked to provide 1-2 questions totaling ~7 points (100 points total). The final grade will be based on the final score of the final examination.

Fall 2016 Schedule

DATE	TOPIC	INSTRUCTOR
August 23	Ethics in Science/Scientific Communication	Z. Dave Sharp
August 30	Nucleic Acid Techniques	Yanfen Hu
September 6	Protein Techniques I	Thomas Boyer
September 13	Protein Techniques II	Hai Rao
September 20	DNA Protein Interactions	Shoulei Jiang
September 27	Bioinformatics	Victor Jin
October 4	Single Cell Analysis	Chun-Liang Chen
October 11	Yeast Genetics	Sang Eun Lee
October 18	Transgenic Animals	E. Paul Hasty
October 25	Antibody Production/Characterization	Kexin Xu
November 1	Cell Biology Techniques	P. Renee Yew

DATE	TOPIC	INSTRUCTOR
November 8	Spectroscopy	Pawel Osmulski
November 15	Microscopy/Imaging	Maria Gaczynska
November 22	Thanksgiving Week - No class	
November 29	Multiplex systems to analyze cytokine and chemokines from animals and humans	Jay Larry Morris
December 6	Principals of FACS Analysis and its Applications to Biological Questions	Benjamin Daniel
December 13	Final Examination (on all course content)	Term ends Dec 16