

MCB 252: Cell Biology Fall 2019 Tentative Lecture and Discussion Syllabus

Date	Lecture Topic	Lecturer	Discussion/Homework Information
Mon, 26 Aug	Course Introduction		Discussion: Introduction and Policies • August 26-27 Discussion will begin on Monday, August 26, 2019 in 107 Burrill Hall. You will review course policies with your TA.
Wed, 28 Aug	Physiology of Biomembranes	Prasanth	
Fri, 30 Aug	Signal-transduction and G-protein-coupled receptors	Prasanth	
Mon, 2 Sept	No class- Labor Day Holiday	Prasanth	No discussion September 2 or September 3 due to Labor Day Holiday. • Homework 1 due Sept. 4
Wed, 4 Sept	Signaling pathways that control gene expression: Ras Pathway part 1	Prasanth	
Fri, 6 Sept	Signaling pathways that control gene expression: Ras Pathway part 2	Prasanth	
Mon, 9 Sept	Signal reception and integration: Ubiquitin and proteasome-mediated protein degradation	Prasanth	Discussion Week 1 • Sept. 9-10, Problem Set 1 • Homework 2 due Sept. 11
Wed, 11 Sept	Nuclear periphery	Prasanth	
Fri, 13 Sept	Regulation of Nucleo-cytoplasmic transport part 1	Prasanth	
Mon, 16 Sept	Regulation of Nucleo-cytoplasmic transport part 2	Prasanth	Discussion Week 2 • Sept. 16-17, Problem Set 2 • Homework 3 due Sept. 18
Wed, 18 Sept	Transcription- DNA Control Regions and Proteins part 1	Prasanth	
Fri, 20 Sept	Transcription- DNA Control Regions and Proteins part 2	Prasanth	
Mon, 23 Sept	No Lecture–Optional Question/Answer Session	Prasanth	Discussion Week 3 • Sept. 23-24, Problem Set 3 • Homework 4 due Sept. 25
Tues, 24 Sept	MCB 252 Exam 1 (7–9 PM)	Prasanth	
Wed, 25 Sept	Nuclear and Chromatin Structure	Prasanth	
Fri, 27 Sept	Histone Code, Chromatin and Transcription part 1	Prasanth	
Mon, 30 Sept	Histone Code, Chromatin and Transcription part 2	Prasanth	Discussion Week 4 • Sept. 30-Oct. 1, Problem Set 4 • Homework 5 due Oct. 2
Wed, 2 Oct	Epigenetics	Prasanth	
Fri, 4 Oct	Pre-mRNA Splicing, Polyadenylation part 1	Prasanth	
Mon, 7 Oct	Pre-mRNA Splicing, Polyadenylation part 2	Prasanth	Discussion Week 5 • Oct. 7-8, Discussion Problem Set 5 • Homework 6 due Oct. 9
Wed, 9 Oct	Regulation of mRNA Processing, mRNA Turnover part 1	Prasanth	
Fri, 11 Oct	Regulation of mRNA Processing, mRNA Turnover part 2	Prasanth	
Mon, 14 Oct	No Lecture–Optional Question/Answer Session	Prasanth	Discussion Week 6 • Oct. 14-15, Problem Set 6 • Homework 7 due Oct. 16
Tues, 15 Oct	MCB 252 Exam 2 (7–9 PM)	–	
Wed, 16 Oct	Intro to Part 2 (Dr. Rivier)	Rivier	
Fri, 18 Oct	Techniques and Technology	Rivier	

Date	Lecture Topic	Lecturer	Discussion Topic
Mon, 21 Oct	Properties and Dynamics of Actin	Rivier	Discussion Week 7 • Oct. 21-22, Problem Set 7 • Homework 8 due Oct. 23
Wed, 23 Oct	Role of Actin in Cell Movement	Rivier	
Fri, 25 Oct	Regulation of Actin Assembly	Rivier	
Mon, 28 Oct	Stable Actin Structures	Rivier	Discussion Week 8 • Oct. 28-29, Problem Set 8 • Homework 9 due Oct. 30
Wed, 30 Oct	Muscle Cells and Myosin Motors	Rivier	
Fri, 1 Nov	Muscle Cells and Myosin Motors	Rivier	
Mon, 4 Nov	Intermediate Filaments	Rivier	Discussion Week 9 • Nov. 4-5, Problem Set 9 • Homework 10 due Nov. 6
Wed, 6 Nov	Microtubules	Rivier	
Fri, 8 Nov	Microtubule Organizing Centers	Rivier	
Mon, 11 Nov	No Lecture–Optional Question/Answer Session	Rivier	Discussion Week 10 • Nov. 11-12, Problem Set 10 • Homework 11 due Nov. 13
Tues, 12 Nov	MCB 252 Exam 3 (7–9 PM)	–	
Wed, 13 Nov	Microtubule Motors	Rivier	
Fri, 15 Nov	Integrating Cells into Tissues- Cell Adhesion, part 1	Rivier	
Mon, 18 Nov	Integrating Cells into Tissues- Cell Adhesion, part 2	Rivier	Discussion Week 11 • Nov. 18-19, Problem Set 11 • Homework 12 due Nov. 20
Wed, 20 Nov	Cell Junctions	Rivier	
Fri, 22 Nov	Cell Cycle- Embryonic Cycle and Biochemistry	Rivier	
25-29 Nov	No Classes–Fall Break	–	No Classes–Fall Break
Mon, 2 Dec	Cell Cycle- Genetic Analysis of the Yeast Cell Cycle	Rivier	Discussion Week 12 • Dec. 2-3, Problem Set 12 • Homework 13 due Dec. 4
Wed, 3 Dec	Genetic Basis of Cancer	Rivier	
Fri, 6 Dec	Cell Cycle- Genetic Analysis of the Yeast Cell Cycle	Rivier	
Mon, 9 Dec	Cell Cycle Regulation and Cancer, part 1	Rivier	Discussion Week 13 • Dec. 9-10, Problem Set 13
Wed, 11 Dec	Cell Cycle Regulation and Cancer, part 2	Rivier	
Thurs, 12 Dec	Reading Day–No Classes	–	
Thurs, 19 Dec	Final Exam (Thursday, December 19, 8-11am, Room TBA)	–	