

Cell Biology 331
Fall 2018
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Learning Objectives: Following completion of this course, the students should have an understanding of the chemical basis of life, structure and function of eukaryotic cells and their metabolism, cellular membranes, organelles, motility and regulation of signaling pathways.

<u>Week</u>	<u>Dates</u>	<u>Topics</u>
1	Aug. 20, 22, 24	Why is the Study of Cell Biology Relevant to Us Introduction to the Study of Cell Biology (Ch.1)
2	Aug. 27, 29, 31	Review: The Chemical Basis of Life (Ch.2)
3	Sept. 3 Sept. 5 7	Academic & Staff Holiday Review: The Chemical Basis of Life (Ch.2)
4	Sept. 10 Sept. 12 & 14	Take-home Exam 1: Chapters 1-2 and calculations Review: Energy, Enzymes and Metabolism (Ch.3)
5	Sept. 17, 19 & 21	Structure and Function of Plasma Membrane (Ch.4)
6	Sept. 24, 26 & 28	Structure and Function of Plasma Membrane (Ch.4) Aerobic Respiration and Mitochondrion (Ch.5)
7	Oct. 1, 3 & 5	Aerobic Respiration and Mitochondrion (Ch.5) Exam 2: Chapters 3-5
8	Oct. 8, 10 & 12	Photosynthesis and the Chloroplast (Ch.6) Interactions between Cells and Environment (Ch.7)
9	Oct. 15, 17 Oct. 19	Interactions between Cells and Environment (Ch.7) Academic Holiday
10	Oct. 22, 24 & 26	Exam 3: Chapters 6-7 Cytoplasmic Membrane Systems: Structure, Function, and Membrane Trafficking (Ch.8)

11	Oct. 29 & 31 Nov. 2	Cytoplasmic Membrane Systems: Structure, Function, and Membrane Trafficking (Ch.8) Cytoskeleton and Cell Motility (Ch.9)
12	Nov. 5, 7 & 9	Cytoskeleton and Cell Motility (Ch.9)
13	Nov. 12, 14 & 16	Cytoskeleton and Cell Motility (Ch.9) Exam 4: Chapters 8-9
14	Nov. 19 & 21 Nov. 24	Cell Signaling: Communication between Cells and Environment (Ch. 15) Academic Holiday
15	Nov. 26, 28 & 30	Cell Signaling: Communication between Cells and Environment (Ch. 15)
16	Dec. 3, 5 & 7	Cell Signaling: Communication between Cells and Environment (Ch. 15) Catch-up & Review
17	Dec 10-14	Final Exam (Chapter 15 + overall 1-9)

Textbook: Cell and Molecular Biology by Gerald Karp 6th- 8th Edition

Class: Jones Annex 101. Lecture attendance is mandatory.

Lectures will be accompanied by PowerPoint.
Students are responsible for any & all material covered by the designated chapters in the text book.

$$\text{Final Grade} = \{ \% \text{ on Exams } 1 + 2 + 3 + 4 + \text{comprehensive final} \} / 5$$

Your completed exams will be retained, but if you wish to review and study from them, you are welcome to do so in my presence.

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