

Course Outline

Molecular Biology

This outline provides an overview of the course and assignments by week. Please remember to check the calendar for specific due dates.

Each course module runs for a period of seven (7) days, i.e., one week. Due dates for readings and other assignments are referred to by the day of the module week in which they are due. For example, if a reading assignment is to be completed by Day 3 and the module started on Monday, then the reading assignment should be completed by Wednesday or the 3rd day of the module.

Module	Start Dates	Topics	Assignments
Module 1	01/25/21	Introduction to Cell Biology and the Chemistry of the Cell	Readings: Becker's World of the Cell – Preview of the Cell <ul style="list-style-type: none">• Review module videos• Complete module 1 quiz• Participate in module discussion• Participate in student introductions
Module 2	02/01/21	Macromolecules of the Cell	Readings: Becker's World of the Cell – Macromolecules of the Cell <ul style="list-style-type: none">• Review module videos• Complete module 2 quiz• Participate in module 2 discussion
Module 3	02/08/21	Introduction to Cells and Organelles	Readings: Becker's World of the Cell – Cells and Organelles <ul style="list-style-type: none">• Review module videos• Complete module 3 quiz• Complete module 3 assignment• Participate in module 3 discussion
Module 4	02/15/21	Enzymes	Readings: Becker's World of the Cell – Enzymes <ul style="list-style-type: none">• Review module videos• Complete module 4 quiz• Complete technical paper review

Module	Dates	Topics	Assignments
Module 5	02/22/21	Membranes and the Endomembrane System	Readings: Becker's World of the Cell - Membranes <ul style="list-style-type: none"> Review module videos Complete module 5 quiz Participate in module 5 discussion
Module 6	03/01/21	Membrane Transport	Readings: Becker's World of the Cell – Membrane Transport <ul style="list-style-type: none"> Review module videos Complete module 6 quiz Participate in module 6 discussion
Module 7	03/08/21	Midterm	<ul style="list-style-type: none"> Study for and complete the midterm
Module 8	03/15/21	DNA, Chromosomes, the Nucleus	Readings: Becker's World of the Cell – Information: DNA <ul style="list-style-type: none"> Review module videos Complete module 8 quiz Complete module 8 discussion Complete technical paper evaluation
Module 9	03/22/21	Signal Transduction	Readings: Becker's World of the Cell – Information: Signal Transduction <ul style="list-style-type: none"> Review module videos Complete module 9 quiz Complete module 9 discussion Complete module 9 assignment
Module 10	03/29/21	Recombinant DNA Technology	Readings: Becker's World of the Cell – DNA Technology <ul style="list-style-type: none"> Review module videos Complete module 10 quiz Complete technical paper evaluation
Module 11	04/05/21	Cell Cycle, Mitosis, and DNA Replication	Readings: Becker's World of the Cell – Signal Transduction <ul style="list-style-type: none"> Review module videos Complete module 11 quiz Complete module 11 discussion Complete module 11 assignment

Module	Dates	Topics	Assignments
Module 12	04/12/21	Regulation of Gene Expression	Readings: Becker's World of the Cell – Gene Expression <ul style="list-style-type: none"> • Review module videos • Complete module 12 quiz • Complete module 12 Discussion
Module 13	04/19/21	Gene Expression	Readings: Becker's World of the Cell – Gene Expression <ul style="list-style-type: none"> • Review module videos • Complete module 13 quiz • Complete module 13 discussion • Complete module 13 assignment
Module 14	04/26/21	Final Exam	<ul style="list-style-type: none"> • Review modules 8 through 13 course materials • Complete and submit final exam