

Curriculum Map for BIOL 112 Introduction to Cellular Biology and Genetics

Month	Standards (based on Houghton)	Content	Corresponding Lab(s)	Other Assessments
September	DG4 DG3 DG1 DG2	Course Introduction Nature of Science (Ch. 1) Scientific Inquiry Basic Chemistry (Ch. 2)	Metrics and Conversions Variables Scientific Method Microscopy	Vocabulary activities Discussion Posts Case Study and/or practice problems Chapter and lab quizzes
October	DG4 DG1 DG2	Basic Chemistry Organic Compounds (Ch.3) Exam 1 Cell Introduction (Ch. 4) Cell Organelles	pH and Buffers Cell Composition Cell Structure/Function	Vocabulary activities Discussion Posts Case Study and/or practice problems Chapter and lab quizzes Exam 1 (CH. 1-3)
November	DG4 DG1 DG2	Cell Organelles cont. Cell Membranes (Ch. 5) Metabolism (Ch. 6)	Cell Structure/Function Diffusion/Osmosis Enzymes	Vocabulary activities Discussion Posts Case Study and/or practice problems Chapter and lab quizzes

December	DG5 DG4 DG1 DG2	Metabolism cont. Scientific Writing Exam 2	Lab Report Respiration Fermentation	Vocabulary activities Discussion Posts Case Study and/ or practice problems Chapter and lab quizzes Exam 2 (CH 4-6)
January	DG4 DG1 DG2	Photosynthesis (Ch. 7) Respiration (Ch. 8)	Photosynthesis Chromatography Mitosis	Vocabulary activities Discussion Posts Case Study and/ or practice problems Chapter and lab quizzes
February	DG4 DG1 DG2	Cell Cycle and Mitosis (Ch. 9) Cancer Exam 3 Meiosis (Ch. 10)	Cancer virtual lab Meiosis and Patterns of Inheritance	Vocabulary activities Discussion Posts Case Study and/ or practice problems Chapter and lab quizzes Exam 3 (CH 7-9)
March	DG4 DG1 DG2	Meiosis cont. Mendelian Genetics (Ch. 11)	Genetics Gel Electrophoresis	Vocabulary activities Discussion Posts Case Study and/ or practice problems Chapter and lab quizzes

April	DG4 DG1 DG2	DNA (Ch. 12) Transcription Translation Exam 4	PGLO Bacterial Transformation Animal Development	Vocabulary activities Discussion Posts Case Study and/or practice problems Chapter and lab quizzes Exam 4 (CH 10-12)
May	DG4 DG1 DG2	Gene Regulation (Ch. 13)	Gene Lab	Vocabulary activities, Discussion Posts, Case Studies, and/or practice problems
June	DG5	Animal Tissue Mini Project or Final Exam	Dissections	_____