

BIO 121 Course Topics and Schedule: Spring 2014

WEEK	DATES	LECTURE: Monday	LAB: Wednesday
1	Jan 20-24		Intro, Syllabus, Cell theory, Atoms & Bonding, Electronegativity 1. Lab Safety and Notebook
2	Jan. 27- 31	Periodic table, Bonding Hydrogen Bonding, Water, pH	2. Intro. to Pipets and Volumes 3. Molarity
3	Feb. 3-7	Carbohydrates and Proteins Proteins, Lipids and Review (last day 50% tuition refund: Feb. 5 th)	4. Serial Dilutions 5. Standard curves/ Spectrophotometer 5a. Calculations and Graphs
4	Feb. 10-14	Chemistry of the cell conclusion, Membrane Structure Introduction Exam 1 review	No Lab this week (Wednesday)
5	Feb. 17-21	(NO CLASS: Monday Feb. 17th)	EXAM 1(M&W) (Feb. 19th) 6. Protein/Lipid Lab (EXAM 1: Friday Class 21st)
6	Feb. 24- 28	Membrane structure: Phospholipids, Cholesterol, Transmembrane proteins Fluidity, Diffusion Permeability and Facilitated Diffusion	7. Diffusion 8. Osmosis

7	Mch. 3-7	Ion Channels, Carriers, Endocytosis/Exocytosis Active Transport	Preparation for TECHNIQUE EXAM 1 TECHNIQUE EXAM 1 9. Microscopes
8	Mch. 10-14	Cell Signaling and Adhesion Exam 2 review	EXAM 2 (M&W) (Mch. 12th) 10. Catalase Lab Experiment EXAM 2: Friday Class
9	Mch. 17-21	NO CLASSES THIS WEEK SPRING BREAK	NO CLASSES THIS WEEK SPRING BREAK
10	Mch. 24-28	Energy and Enzymes Enzyme Kinetics and Enzyme Regulation	11a. Tyrosinase Lab 1 11b. Tyrosinase Lab 2
11	Mch. 31- Apr 4	Metabolism and Glycolysis Mitochondria and Citric Acid Cycle	11c. Tyrosinase Lab 3 11d. Tyrosinase Lab 4 11e. Tyrosinase Lab Report
12	Apr. 7-11 (Advising Week)	Electron Transport Chain and Oxidative Phosphorylation	12. Pigment Chromatography 13. Chloroplasts Exam 3: Friday Class

13	Apr. 14-18	<p>EXAM 3 (Monday, April 14th)</p> <p>(Final date to withdrawal APRIL 15th)</p>	<p>14. DNA /Mitosis</p> <p>15. Mitosis Lab</p> <p>No Friday Class this week (Spring 2014)</p>
14	Apr. 21-25	<p>Nucleus and DNA structure and replication</p> <p>DNA Replication and RNA Transcription</p>	<p>15. Mitosis stages and slides</p> <p>16. Meiosis and Mitosis Compared</p> <p>Lab Notebook Review</p>
15	Apr. 28 – May 2	<p>RNA Transcription and Translation: Protein synthesis/ Gene Expression</p>	<p>17. Mendelian Genetics Worksheets</p> <p>TECHNIQUE EXAM 2 (May 1)</p>
16	May 5-9	<p>Protein Processing: Endoplasmic Reticulum and Golgi Apparatus</p> <p>Review for Exam</p>	<p>17. Mendelian Genetics Continued</p>
17	May 12-19	<p>FINAL EXAM</p> <p>M/W section: (Monday May 19th)</p> <p>Friday section: (Friday May 16th)</p>	