



The following lectures are covered on the second exam.
The following lecture schedule contains links to the book sections from [Biology](#) from OpenStax College (CC-BY 4.0)

| | Week | Lectures | Topic with link to Openstax pages | Openlab Supplement |
|-----|-------------|-----------------|--|-----------------------------------|
| | 8. | | MACROMOLECULES I Monomers and Polymers Dehydration Synthesis and Hydrolysis Carbohydrates Lipids | Macromolecules I |
| V | 9. | | MACROMOLECULES II Proteins Nucleic Acids ATP Enzymes and Metabolic Pathways | Macromolecules II |
| | 10. | | CELLS The Cell Theory Methods of Studying Cells Cellular Size Limitations Cell Composition Prokaryotic and Eukaryotic Cells Cellular Evolution Anaerobic and Aerobic Cells; Endosymbiosis; Multicellularity; Viruses, Bacteria and Archaea | Cells |
| VI | 11. | | THE EUKARYOTIC CELL Eukaryotic Cell Structure and Function | Eukaryotes |
| | 12. | | MEMBRANES & TRANSPORT Membrane Structure and Function Passive Transport Processes Active Transport Processes Cell Surface Modifications | Membranes |
| VII | 13. | | <u>Examination II</u> (Lectures 8-12 inclusive) | |