

## BIOLOGY

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| <p><b>Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Cytoskeleton Components</li> <li><input type="checkbox"/> Anatomy &amp; Life Cycles of Bacteria and Viruses</li> <li><input type="checkbox"/> Mitosis and Meiosis</li> <li><input type="checkbox"/> Organ Systems<br/>(Reproductive, Respiratory, Digestive, Muscular, Skeletal, Integumentary, Circulatory, Excretory, and Lymphatic)</li> <li><input type="checkbox"/> DNA Biotechnology</li> </ul> | <p><b>Extremely Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Classical and Molecular Genetics</li> <li><input type="checkbox"/> Enzymes</li> <li><input type="checkbox"/> Cell Membrane</li> <li><input type="checkbox"/> Nervous System</li> <li><input type="checkbox"/> Endocrine System</li> <li><input type="checkbox"/> Central Dogma of Biology</li> </ul> |
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## BIOCHEMISTRY

**Keep in Mind:** Generally, most of Biochem is very important.

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| <p><b>Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Structures, Properties and Metabolism of Carbs, Fats, and Proteins</li> <li><input type="checkbox"/> Gluconeogenesis, Beta-Oxidation, Pentose Phosphate Pathway</li> <li><input type="checkbox"/> Structures, Properties, and Metabolism of Nucleic Acids</li> <li><input type="checkbox"/> Membranes</li> </ul> | <p><b>Extremely Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Aerobic and Anaerobic Respiration<br/>(Prokaryotic cells, ETC, TCA, and Glycolysis)</li> <li><input type="checkbox"/> Lab Techniques (Reducing/Non-Reducing SDS-PAGE, PCR, Blots, Cation and Anion Exchange, Ligand affinity)</li> <li><input type="checkbox"/> Enzyme Inhibitions and Kinetics (Michaelis-Menten)</li> <li><input type="checkbox"/> Amino Acids<br/>Structures, Chemical Properties + 1-Letter Abbreviations + 3-Letter Abbreviations</li> </ul> |
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## PHYSICS

**Note:** Be prepared to do a lot of calculations with scientific notation without calculators and keep an eye out for concepts that can be linked to biology and healthcare

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| <p><b>Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Light and Optics</li> <li><input type="checkbox"/> Sound and Wave (Photon Numbers vs. Energy of Photons)</li> <li><input type="checkbox"/> Radioactive Decay</li> <li><input type="checkbox"/> Energy and Force</li> <li><input type="checkbox"/> Electromagnetism</li> </ul> | <p><b>Extremely Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Circuits</li> <li><input type="checkbox"/> Kinetic Molecular Theory</li> <li><input type="checkbox"/> Units and Conversions</li> <li><input type="checkbox"/> Fluids<br/>(Relationships Between Pressure, Diameter, Resistance)<br/>(Connection to Circulatory System)</li> </ul> |
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## GENERAL CHEMISTRY

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| <p><b>Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Periodic Trends<br/>(Electronegativity, Atomic Size, etc.)</li> <li><input type="checkbox"/> Redox Reactions</li> <li><input type="checkbox"/> Electrochemistry<br/>(Electrochemical Cell)</li> </ul> | <p><b>Extremely Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Equilibrium</li> <li><input type="checkbox"/> Bioenergetics (Free Energy, Entropy, Enthalpy)</li> <li><input type="checkbox"/> Gases and Pressure (Ideal Gas Law)</li> <li><input type="checkbox"/> Solubility and Molarity</li> <li><input type="checkbox"/> Basic Chemistry Math<br/>(Balancing Equations, Scientific Notation, Units (SI and conversions))</li> <li><input type="checkbox"/> Acid/Base (pH, pI, and Buffers)</li> <li><input type="checkbox"/> Stoichiometry</li> </ul> |
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## ORGANIC CHEMISTRY

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| <p><b>Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> SN1 vs SN2 Reactions</li> <li><input type="checkbox"/> Aldol Condensation</li> <li><input type="checkbox"/> Nomenclature (IUPAC)</li> </ul> | <p><b>Extremely Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Types of Isomers (Diastereomers, Anomers, Enantiomers, etc.)</li> <li><input type="checkbox"/> Lab Techniques (NMR, Chromatography, IR, Distillation, etc.)</li> <li><input type="checkbox"/> Functional Groups</li> <li><input type="checkbox"/> Bonding (Carbonyl Group)</li> </ul> |
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## SOCIOLOGY

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| <p><b>Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Social Determinants of Health</li> <li><input type="checkbox"/> Healthcare Disparities</li> <li><input type="checkbox"/> Cultural Relativism vs. Ethnocentrism</li> <li><input type="checkbox"/> Dramaturgical Theory</li> </ul> | <p><b>Extremely Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Functionalism vs. Conflict Theory vs. Symbolic Interactionism vs. Social Constructionism</li> <li><input type="checkbox"/> Roles, Groups, and Status</li> <li><input type="checkbox"/> Social Institutions</li> </ul> |
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## PSYCHOLOGY

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| <p><b>Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Stereotype vs. Discrimination vs. Prejudice</li> <li><input type="checkbox"/> Sensation and Perception<br/>(Signal Detection Theory)</li> <li><input type="checkbox"/> Memory<br/>(Storing and Retrieval)</li> <li><input type="checkbox"/> Theories of Motivation</li> </ul> | <p><b>Extremely Important</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Social Perception (Halo Effect, Just World, Primacy/Recency)</li> <li><input type="checkbox"/> Classical and Operant Conditioning</li> <li><input type="checkbox"/> Attribution Theory</li> <li><input type="checkbox"/> Research Design and Interpreting Statistical Data</li> <li><input type="checkbox"/> Psychological Disorders</li> <li><input type="checkbox"/> Neurobiology and Neurotransmitters</li> <li><input type="checkbox"/> Identity and Development Theories (Piaget and Kohlberg)</li> <li><input type="checkbox"/> Biases (Cognitive Bias)</li> <li><input type="checkbox"/> Theories of Emotion</li> </ul> |
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