



TOP SCORER MCAT RECOMMENDATIONS

“MUST-KNOW” MCAT TOPICS MCAT MASTERY CHECKLIST

“MUST-KNOW” MCAT TOPICS – MCAT MASTERY CHECKLIST

Dear Future Doctor,

Those before you who have dominated the MCAT have recommendations, strategies, tactics, and shortcuts for you to make your MCAT prep life easier, smoother, and a lot more effective.

Our job is to go out there, gather that top-scorer wisdom, filter out the junk, and provide you with the best of the best, most-common top-scorer strategies that have been proven to get extremely competitive scores that stand out to med-schools.

This checklist is just one of the resources we have for you that covers the MCAT topics that top scorers claim are ‘must-know’ and very high yield. These are concepts that you’ll see show up most frequently on AAMC materials and exams.

This is valuable especially if you’re just starting out with practice exams, so you know exactly what you need to have reviewed and completely understood before writing your first exam.

Keep in mind however that technically, anything that the AAMC has listed on its list of MCAT topics could show up on the MCAT. These are just topics that are seen most often.

Below, you’ll find that each MCAT section has two parts; *extremely important* and *important*. The extremely important ones are those that have a 90% chance of showing up on your exam. Give special attention to those.

We recommend printing this checklist out and making sure you know these topics like the back of your hand!

Lastly, we truly hope you find this valuable. Remember, the MCAT can be hacked. It doesn’t have to be a painful, difficult process. Especially when you have [proven step-by-step strategies to increase your MCAT score](#) no matter where you’re at right now.

You got this,

The MCAT Mastery Team

Your MCAT Success Mentors

"MUST-KNOW" MCAT TOPICS – MCAT MASTERY CHECKLIST

BIOLOGY

Important

- Cytoskeleton Components
- Anatomy & Life Cycles of Bacteria and Viruses
- Mitosis and Meiosis
- Organ Systems – Reproductive, Respiratory, Digestive, Muscular, Skeletal, Integumentary

Extremely Important

- Classical and Molecular Genetics
- Hormones
- Enzymes
- Cell Membrane
- Organ Systems – Nervous, Endocrine, Circulatory, Excretory, Lymphatic

BIOCHEMISTRY

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

Important

- Structures, Properties and Metabolism of Carbs, Fats, and Proteins
- Gluconeogenesis, Beta-Oxidation, Pentose Phosphate Pathway
- Structures, Properties, and Metabolism of Nucleic Acids

Extremely Important

- Enzyme Kinetics (Particularly Michaelis-Menten)
- Aerobic and Anaerobic Respiration
 - Especially ETC, TCA, and Glycolysis
- Lab Techniques (Reducing/Non-Reducing SDS-PAGE, PCR, Blots)
- Amino Acids
 - Structures, Chemical Properties + 1-Letter Abbreviations + 3-Letter Abbreviations

PHYSICS

Important

- Optics
- Electrochemistry
- Radiation
- Energy
- Sound

Extremely Important

- Circuits and Electromagnetism
- Units and How To Convert Between Them
- Fluids
 - Relationships Between Pressure, Diameter, Resistance
 - How They Connect to Circulatory System

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.

GENERAL CHEMISTRY

Important

- Periodic Trends (Electronegativity, Atomic Size, etc.)
- Redox Reactions

Extremely Important

- Bioenergetics
 - Free Energy, Entropy, Enthalpy
- Acid/Base Chem
 - pH and pI

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ORGANIC CHEMISTRY

Important

- SN1 vs SN2 Reactions

Extremely Important

- Carbonyl Chemistry
- Types of Isomers
 - Diastereomers, Anomers, Enantiomers, etc.)
- Lab Techniques
 - NMR, Chromatography, IR, Distillation, etc.)
- Functional Groups

SOCIOLOGY

Important

- Social Determinants of Health
- Healthcare Disparities
- Cultural Relativism vs. Ethnocentrism

Extremely Important

- Functionalism vs. Conflict Theory vs. Symbolic Interactionism vs. Social Constructionism

PSYCHOLOGY

Important

- Harlow Monkey Experiments
- Self-Identity
 - Theories of Development especially
- Theories of Emotion
- Stereotype vs. Discrimination vs. Prejudice
- Theories of Sensory Processing
- Folkways vs. Mores vs. Taboos

Extremely Important

- Social Perception
 - Halo Effect, Just World, Primacy/Recency
- Classical and Operant Conditioning
- Research Design
- Attribution Theory
- Interpreting Statistical Data