

High-yield topics and the MCAT—what pre-meds should know

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In preparing for the Medical College Admission Test (MCAT), studying high-yield topics—those that appear most frequently in the exam's four sections—can pay dividends.

"The mistake test-takers make is they tend to want to treat everything equally, not realizing that there is a proportions game that comes into play," said Petros Minasi, Kaplan's senior director of pre-health programs. "Pre-med students should be strategic on where they are putting their emphasis."

Still, defining which topics qualify as high-yield and how to best cover them is tricky. An expert on MCAT prep, Minasi offered his insight.

What are the high-yield topics?

Certain topics are simply more commonly tested than others. Minasi offered a list—based on Kaplan's experience with the exam—by the types of sciences the exam covers.

These largely apply to three MCAT sections: biological and biochemical foundations of living systems; chemical and physical foundations of biological systems; and psychological, social and biological foundations of behavior. The critical analysis and reasoning skills (commonly referred to as CARS) is largely based on inference.

Biological sciences: Biochemistry of proteins, enzymes, amino acids, DNA, molecular biology, oxidative phosphorylation, and general cell biology.

Physical sciences: Thermodynamics, chemical reactions, oxidation reduction, and acids and bases.

Physics: Kinematics, forces, work, torque, waves and electrostatics.

Behavior sciences: Learning and memory, demographics, social behavior and group psychology.

Additional tidbits

Cover the basics. Some of the topics above are more advanced concepts, but to truly understand them, you'll need to cover the basics.

"Some topics might not be directly tested at higher yield, but are indirectly tested. A perfect example for this is organic chemistry. While there are some questions on the MCAT that test organic chemistry directly, there are a lot of questions, particularly in biochemistry, that require a strong working knowledge of it in order to get the questions correct."

Topics alone aren't enough. "Students need to build a study plan that includes all of the scientific topics, with extra emphasis on the higher yield topics, but will also want to practice the critical thinking skills that are simultaneously tested on the MCAT," Minasi said.

Practice makes perfect. The AMA and Kaplan have collaborated on a library of MCAT stumpers that can help pre-meds prepare for the exam. The [AMA pre-med glossary guide](#) has the answers to frequently asked questions about medical school, the application process, the MCAT and more. Kaplan also offers free study plans for prospective test takers.