RESEARCH-BACKED STUDY SCHEDULE

A Psychology-Informed MCAT Plan

Built on cognitive science (how memory actually forms) and the habits of high scorers - not on grinding hours. Every rule below is tied to evidence cited at the end.

The numbers that anchor a plan

- **Total volume.** AAMC guidance and large test-taker surveys converge on ~300-350 focused hours; the efficient window for a 510-515 target is roughly 250-350 hours over 3-6 months.
- **Cadence.** A 3-month plan is ~3+ hours/day; a 6-month plan is ~12-15 hours/week. Consistency beats intensity.
- **Predictor.** Anchor readiness on the mean of your last two AAMC full-lengths taken under real conditions - the most accurate available estimate.

The seven evidence rules (the engine)

Rule	Why it works (evidence)
Retrieve, don't reread	Testing yourself produced ~50% more recall a week later than rereading (Roediger & Karpicke, 2006).
Space, don't cram	Spacing beat massing in 96% of comparisons (Cepeda 2006); distributed practice + testing are the top techniques (Donoghue & Hattie 2021, 242 studies).
Interleave topics	Mixing improves transfer (~65% vs 50%; Kornell & Bjork). Feels harder - that difficulty is productive.
Protect sleep	Sleep consolidates memory (SWS/REM). Deprivation cut memory ~20%, concentration ~23%, and inflates false confidence.
Move your body	RCT meta-analyses: aerobic training improves attention, processing speed, executive function, memory; acute 20-30 min lifts same-day cognition.
Manage anxiety	Meta-analyses: interventions reduce test anxiety AND raise performance; mindfulness ranks first, then multi-component and CBT.
Take real breaks	Focus degrades after ~20-30 min; short or self-regulated breaks restore attention. Build them in - don't push through fatigue.

The daily template (repeatable engine)

Block	Minutes	What you do	Rule served
Warm-up recall	20-30	Anki due cards + yesterday's misses, closed-book	Retrieve / Space
New content	60-90	One topic, mechanism-first; make recall prompts as you go	Deliberate practice
Move	20-30	Brisk walk/run or workout (between blocks)	Exercise
Interleaved practice	60-90	Mixed-topic discrete + 1-2 passages; timed	Interleave / Retrieve
Review to mechanism	45-60	Every miss: why right answer right, why yours wrong	Deliberate practice
Reset	5-10	Mindfulness / slow breathing before you stop	Anxiety / Breaks

Breaks every 25-50 minutes (use whatever interval keeps you fresh - self-regulated breaks work as well as fixed ones). One full rest day per week.

The three phases

1. **Phase 1 - Build (≈45% of timeline).** Content mechanism-first; start Anki day one; light interleaved practice. Diagnostic full-length early to set the baseline.
2. **Phase 2 - Apply (≈40%).** Practice-heavy and interleaved; one full-length every 1-2 weeks under real conditions; review each to mechanism; Anki carries retention.
3. **Phase 3 - Sharpen & taper (≈15%).** Full-length-driven targeted review of weak tags; in the final 3-4 days reduce volume, stop new material, and protect sleep so you arrive consolidated, not depleted.

Wellness scaffolding (non-negotiable)

The four habits that protect your score

- Sleep 7-9 hours on a consistent schedule - consistency itself tracks with higher performance. Never trade sleep for cramming.
- Exercise most days (20-30 min aerobic is enough to lift same-day cognition).
- Down-regulate anxiety daily: brief mindfulness or breathing; reappraise nerves as readiness.
- Plan breaks and one rest day; watch for burnout (cynicism, dread, flat scores) and deload when you see it.

Sources

- AAMC - official MCAT preparation and full-length practice guidance; test-taker survey data on study hours.
- Roediger H.L. & Karpicke J.D. (2006). Test-enhanced learning. Psychological Science.
- Cepeda N.J. et al. (2006). Distributed practice: a meta-analysis. Psychological Bulletin (839 comparisons).
- Donoghue G.M. & Hattie J.A.C. (2021). Meta-analysis of learning techniques (242 studies, ~169,000 participants).
- Dunlosky J. et al. (2013). Improving learning with effective techniques. Psychological Science in the Public Interest.
- Kornell N. & Bjork R.A. - interleaving and inductive learning (transfer ~65% vs 50%).
- Smith C. et al.; Walker M. - sleep-dependent memory consolidation; sleep restriction and recall.
- Okano K. et al. (2019), npj Science of Learning - sleep duration/quality/consistency and academic performance.
- Smith P.J. et al. (2010), Psychosomatic Medicine - aerobic exercise and neurocognition (RCT meta-analysis).
- von Der Embse N. et al. (2018); Huntley C. et al. (2019) - test-anxiety intervention meta-analyses.

Citations are summarized for study use; consult the original papers for full methods. Branding is Bit by Bit MD - The C-Factor Series.