MCAT 2015

A Better Test for Tomorrow’s Doctors

Not a Recipe for Panic!
Health Careers Center

Judy Beniak, Director
Laura Fyfe
Carol Kampa
Wendy Plager
Jennifer Rosand
Scott Simpson
Tricia Todd

Visit us:
Online: www.healthcareers.umn.edu
Phone: 612-624-6767
In Person: 2-565 Moos Tower
History of the MCAT

• Developed in 1928 to improve attrition rates (5-50%)
  – 1928 in perspective:
    • 1st fully automatic photographic film developing machine patented
    • 1st radio telephone connection between Netherlands & US
    • 1st transatlantic TV image received, Hartsdale, NY
    • Benito Mussolini ends women's rights in Italy
Medicine in 1928

• Discovery of penicillin

• Home Pregnancy Test is first introduced in France

• Professors at the School Of Public Health at Harvard University invent the Iron Lung

• Eighteen years after the Flexner Report
MCAT evolution

- Changes in science/medical information
- Changes in understanding of causal factors (SDOH)
- Changes in patient population (Co-morbidity/complexity)

Foundation to new MCAT

• *Summary of the 2009 MR5 Science Content Survey of Undergraduate Institutions*
Similarities

• Both – test content taught in year-long intro courses in biology, gen chem, o-chem, and physics at most colleges.

• Both – ask students to demonstrate that they can solve scientific problems.

• Both – test verbal reasoning skills by asking students to analyze information provided by passages from the humanities and social sciences.

• Both – are computer-based and administered at testing centers.
Differences

• MCAT 2015 tests concepts from - biochemistry, psychology, and sociology.

• MCAT 2015 requires problem solving by integrating concepts from multiple disciplines and using basic research methods and statistics skills in the same ways that scientists do.

• MCAT 2015 tests more subjects and is about two hours longer than the current MCAT exam.
Comparing Old and New Exam

1. Biological Sciences
   a. 52 Q - 70 minutes

2. Physical Sciences
   a. 52 Q - 70 minutes

3. Verbal Reasoning
   a. 40 Q - 60 minutes

1. Biological & Biochemical Foundations of Living Systems
   a. 59 Q - 95 minutes

2. Chemical & Physical Foundations of Biological Systems
   a. 59 Q - 95 minutes

3. Psychological, Social & Biological Foundations of Behavior
   a. 59 Q - 95 minutes

4. Critical Analysis and Reasoning Skills
   a. 53 Q, 90 minutes
Courses

Biological/Physical Sciences
- Introductory biology*
- Introductory chemistry
- Introductory physics*
- Biochemistry

Social Sciences
- Psychology*
- Sociology*
  - anthropology,
  - public/population health,
  - economics, and others

Critical Analysis and Reasoning

* Meet UM liberal education requirements
Research Methods & Statistics Concepts

- basic probability
- measures of central tendency
- measures of variability
- confidence intervals
- statistical significance levels
- graphical presentation of data
- hypothesis formulation
- independent & dependent variables
- hypothesis testing
- reporting research results

Students learn these concepts in introductory biology, chemistry, physics, and biochemistry courses/labs, as well as in introductory psychology and sociology courses.
MCAT2015 has four test sections:

1. Chemical and Physical Foundations of Biological Systems
2. Critical Analysis and Reasoning Skills
3. Biological and Biochemical Foundations of Living Systems
4. Psychological, Social, and Biological Foundations of Behavior

**MCAT2015 Total Score**

- With centers at 125, section scores range from 118 to 132.
- The section scores sum to the total score.
- With its center at 500, the total score ranges from 472 to 528.
Scoring

- **Section Scores**: Each of the four sections will be scored from a low of 118 to a high of 132, with a midpoint of 125.
  - Test takers will receive scores for each of the four sections.
- **Total Score**: Scores for the four sections will be combined to create a total score.
  - The total score will range from 472 to 528. The midpoint is 500.
Score Reporting

• In addition to scores and confidence intervals, test takers will receive percentiles on the MCAT2015 exam.
• Percentile ranks will be reported for the total and section scores so examinees can see how they compare to others who took the new exam.
Helping Students....

REMAIN CALM AND BE AWESOME
MCAT Mapping on Your Campus

MCAT Mapping Project

Lessons Learned:
• Some faculty harder to reach than others
• Great opportunity to connect with key faculty and share office highlights
• Identify gaps in content category topics
• Encourage students to self-study gap topics
Example of GAPS

• Language (CC6B) "Content Category"
• Prejudice and Bias (CC8B)
• Self-presentation and interacting with others (CC8C)

• Direct students to articles or books
• Identify other classes outside of the standard list
• Suggest Mooc’s or online education
Remind Students...

There are no official required courses for the MCAT.

Instead, you are required to have the knowledge....
Resources for Students
Foundational Concepts /Content Categories

https://www.aamc.org/students/services/343550/mcat2015.html#bb
Resources for Students

- The MCAT 2015 Exam for Student AAMC
- MedEd Portal
- Khan Academy for MCAT
Where can you get practice?

- *The Official Guide to the MCAT® Exam (MCAT2015), Fourth Edition* ($30 hard copy; $35 online)
  - Section 1 – everything MCAT
  - Section 2 – content/30 practice question per section (120 total)

- Fall 2014 Full length practice exam (2015 #2)
Resources for Advisors

- Course Mapping Tool MCAT 2015
- What’s on the MCAT2015 Interactive Tool
- *The Official Guide to the MCAT® Exam (MCAT2015), Fourth Edition* ($30 hard copy; $35 online)
  - Section 1 – everything MCAT
  - Section 2 – content/30 practice question per section (120 total)
- Fall 2014 Full length practice exam (2015 #2)