MEDICAL SCHOOL PREREQUISITE COURSES

For lists of accredited programs in the United States

Allopathic Medical Schools
American Association of Medical Colleges (AAMC)
https://www.aamc.org/students/applying/amcas/participating_schools/

Osteopathic Medical Schools
American Association of Colleges of Osteopathic Medicine (AACOM)
http://www.aacom.org/about/colleges/Pages/default.aspx

Texas Medical Schools (Public) - Allopathic
The University of Texas Southwestern Medical Center (Dallas)
The University of Texas Medical Branch at Galveston
The University of Texas Medical School at Houston
The University of Texas School of Medicine at San Antonio
Texas A&M University College of Medicine (Bryan-College Station, Temple)
Texas Tech University Health Sciences Center School of Medicine (Lubbock)
TTUHSC Paul L. Foster School of Medicine at El Paso

Texas Medical School (Public) – Osteopathic
Texas College of Osteopathic Medicine at the University of North Texas HSC - (Ft.Worth)

Texas Medical Schools (Private) - Allopathic
Baylor College of Medicine (Houston)

Application Services:
Texas Medical and Dental Schools Application Service (TMDSAS): the eight public medical schools in Texas
American Medical College Application Service (AMCAS): Baylor College of Medicine and out-of-state allopathic schools
American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS): out-of-state osteopathic schools

The prerequisite courses for medical school listed on pages 2 and 3 of this document are the minimum requirements. It is highly recommended that applicants go beyond the minimum in their preparation for medical school. Premedical students should consider taking additional upper-division biology courses that are relevant to medicine. Science and engineering majors should consider taking additional non-science courses.

MCAT2015 will be testing in several non-science areas, and related course work is important for anyone preparing for medical school and a career in medicine. For more information about MCAT2015 and the implications for your course plan, see page 4.
### Undergraduate Course Requirements

Courses for non-science majors or for health career majors (nursing, pharmacy, allied health sciences, etc.) will NOT satisfy the required coursework. All required coursework must be applicable towards a traditional science degree.

<table>
<thead>
<tr>
<th>Course Field</th>
<th>Required Information</th>
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<tbody>
<tr>
<td><strong>BIOLOGICAL SCIENCES</strong></td>
<td>14 semester hours (12 semester hours of lecture &amp; 2 semester hours of formal lab) includes all Biological Science courses applied toward Baccalaureate degree in traditional science fields, such as General Biology, Biochemistry, Microbiology, Molecular Biology, Genetics, Ecology, Immunology, Parasitology and Anatomy &amp; Physiology.</td>
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<tr>
<td><strong>GENERAL CHEMISTRY</strong></td>
<td>8 semester hours of General Chemistry, including the corresponding laboratory experience are required. (8 semester hours = 6 hours of lecture &amp; 2 hours of lab). Should include familiarity with analytic and volumetric techniques. Inorganic courses include General Chemistry, Physical Chemistry, and Quantitative Analysis.</td>
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<tr>
<td><strong>ORGANIC CHEMISTRY</strong></td>
<td>8 semester hours of Organic Chemistry, including the corresponding laboratory experience are required. (8 semester hours = 6 hours of lecture &amp; 2 hours of lab).</td>
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<tr>
<td><strong>BIOCHEMISTRY</strong></td>
<td>3 semester hours of Biochemistry is required <strong>ONLY</strong> by UT School of Medicine at San Antonio, Texas Tech University HSC School of Medicine, and Texas A&amp;M University College of Medicine. However, it is strongly recommended by all other TMDSAS schools. The course may be taught in the Biology, Biochemistry or Chemistry department. <strong>UT School of Medicine at San Antonio</strong> and <strong>Texas Tech University HSC School of Medicine</strong>: May be used towards fulfilling the Biological Science or Chemistry requirement. <strong>Texas A&amp;M University College of Medicine</strong>: May be used towards fulfilling part of the 6 semester credit hours of advanced Biological Sciences.</td>
</tr>
<tr>
<td><strong>PHYSICS</strong></td>
<td>8 semester hours, as required for college science majors, including the corresponding laboratory experience are required. (8 semester hours = 6 hours of lecture &amp; 2 hours of lab) Includes all physics courses applied toward a baccalaureate degree in any traditional science field.</td>
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### UT AUSTIN COURSE NUMBERS

Information provided by UT Austin - Health Professions Office

<table>
<thead>
<tr>
<th>UT Courses</th>
<th>Alternate UT Courses</th>
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<tbody>
<tr>
<td>BIO 311C &amp; 311D &amp; 325 &amp; 3 hrs BIO elective AND BIO 206L (lab) <strong>NOTE</strong>: May use upper division 2-hour BIO lab (not plant/environment); Some out-of-state schools require 2 semesters of lab.</td>
<td>BIO 315H &amp; 325H &amp; 6 hrs BIO electives AND BIO 206L (lab) <strong>NOTE</strong>: May use upper division 2-hour BIO lab (not plant/environment); Some out-of-state schools require 2 semesters of lab.</td>
</tr>
<tr>
<td>CH 301 &amp; CH 302 AND CH 204 (lab)</td>
<td>CH 301H &amp; CH 302H AND CH 317 (lab/lecture)</td>
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<tr>
<td>CH 320M &amp; CH 320N AND CH 220C (lab)</td>
<td>CH 328M &amp; CH128K (lab) AND CH 328N &amp; CH128L (lab)</td>
</tr>
<tr>
<td>CH 369 <strong>Course number will change to BCH 369 in Fall 2014</strong>  <strong>NOTE</strong>: This course covers fundamentals of biochemistry in one semester.</td>
<td>For Majors Requiring 2+ Sem of Biochem: CH 339K OR BCH 339F (called BIO 337 in Spring 2014) <strong>NOTE</strong>: CH 339K or BCH 339F satisfy requirement, but should take 2nd sem of sequence for medical school prep.</td>
</tr>
<tr>
<td>PHY 317K &amp; PHY 117M (lab) AND PHY 317L &amp; PHY 117N (lab) <strong>NOTE</strong>: This sequence is designed to cover topics for MCAT.</td>
<td>PHY 302K/102M &amp; PHY 302L/102N OR PHY 303K/103M &amp; PHY 303L/103N OR PHY 301/101L &amp; PHY 316/116L</td>
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</tbody>
</table>
## MEDICAL SCHOOL PREREQUISITE COURSES

### ENGLISH
6 semester hours of college English are required. Any course accredited by the English Department that fulfills a general education English requirement of a baccalaureate degree will be accepted. Remedial or developmental courses or "English As a Second Language" courses **ARE NOT ACCEPTED.** The UT Medical Branch at Galveston **WILL NOT ACCEPT** writing intensive courses taught in departments other than English to satisfy the requirement.

<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>E 316L, E 316M, E 316N, or E 316P AND RHE 306</th>
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<tbody>
<tr>
<td>Plan II students: E 603A or TC 603A AND E 603B or TC 603B</td>
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<tr>
<td><strong>NOTE:</strong> E 316K counts but is not offered starting Fall 2014</td>
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### CALCULUS
**Schools Requiring 3 Sem. hrs. Calculus OR Statistics:**
- UT Southwestern Medical Center at Dallas
- The University of Texas Medical Branch at Galveston
- Texas Tech University HSC Paul L. Foster School of Medicine at El Paso

The calculus course can be any calculus course taught by a Math or Physics Department. Business Calculus or any Pre-Calculus courses **ARE NOT ACCEPTED.**

<table>
<thead>
<tr>
<th>CALCULUS</th>
<th>Calculus courses approved by TMDSAS: M 408N, M 408K, or M 408C OR Statistics (see next section)</th>
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<tbody>
<tr>
<td><strong>NOTE:</strong> Some out-of-state schools specifically require calculus.</td>
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</table>

### STATISTICS
**Schools Requiring 3 Sem. hrs. Statistics:**
- The University of Texas School of Medicine at San Antonio
- Texas A&M University College of Medicine
- Texas Tech University HSC School of Medicine
- UNT HSC – Texas College of Osteopathic Medicine

The Statistics course should be taught in a Math or Statistics Department. Individual medical schools may consider statistics courses taught in other departments on an individual basis with appropriate documentation from faculty.

<table>
<thead>
<tr>
<th>STATISTICS</th>
<th>Statistics courses approved by TMDSAS: All TMDSAS medical schools have agreed to accept many of the UT Austin statistics courses that are not taught in math or science departments.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NOTE:</strong> Check with out-of-state schools for acceptance of any statistics course not taught in a math or statistics department.</td>
<td></td>
</tr>
<tr>
<td><strong>See the most current list for all statistics courses approved by TMDSAS schools.</strong></td>
<td></td>
</tr>
</tbody>
</table>

All prerequisite courses must be taken for a letter grade and must be passed with a grade of C or better. Pass/Fail is equal to a D or better and will not satisfy these requirements. For additional details about educational requirements, please see this informative TMDSAS web site. [http://www.tmdsas.com/medical/education_Requirements.html](http://www.tmdsas.com/medical/education_Requirements.html)

Read admissions web sites of out-of-state schools for possible additional requirements.

See the [Medical School Prerequisites Time Line](http://www.tmdsas.com/medical/education_Requirements.html) for assistance in course planning.

SEE NEXT PAGE FOR IMPORTANT MCAT INFORMATION
IMPORTANT INFORMATION ABOUT PREPARING FOR APPLICATION TO MEDICAL SCHOOL

MCAT

MCAT2013 and MCAT2014
For information about these exams see the MCAT web site

MCAT2015
There will be a major change in structure and content of the MCAT in spring 2015. Information as of this date is that MCAT2015 will be used after January 2015, possibly starting in March 2015. Dates are subject to change.

Applicants for the Entering Year 2016 and Later
The Texas Medical and Dental Schools Application Service (TMDAS) have informed us that the eight public medical schools in Texas will accept earlier MCAT scores even after the new MCAT is in use. Baylor College of Medicine has told us that they will do the same. MCATs taken no longer than 5 years before the date of your application will be accepted.

We have heard verbally from the Association of American Medical Colleges (AAMC) that they expect the AMCAS schools to honor their normal grace period for older exams as well. Take note that out-of-state medical schools vary in their MCAT grace periods which are generally from two to four years. Check school admissions web sites or the Medical School Admissions Requirements (MSAR) online www.aamc.org/msar for information about individual schools.

Preparation
Keep in mind that if you take an earlier MCAT and need to retake after January 2015, your retake will be the new MCAT2015 version. It will be important for you to be prepared for it.

2015 MCAT Implications for Medical School Preparation

Although medical school prerequisites have not yet changed, it is important to recognize that medical schools consider the new content to be essential in your preparation for the medical profession and may look for evidence of it in other ways; for example: in your transcripts and in your interviews.

The MCAT web site has a lot of very helpful information about preparation and planning for which MCAT to take. Even those applicants, who are taking the 2013 or 2014 MCAT, would be wise to be prepared in the new content and topics listed in the Preview Guide for the MCAT2015 Exam on the MCAT web site. We recommend PSY 301, SOC 302, introductory ethics, and other courses that help you to develop critical analysis and reasoning skills. Strong reading skill will be more important than ever. For a complete description of the areas and topics that may show up on the new exam, check out the What’s On the MCAT2015 site, Official Guide for the MCAT2015 Exam and the MCAT2015 for Students page periodically; these will be updated whenever new information is available.

MCAT 2015 Scoring

Each of the four subsections will be scored on a scale of 118-132 with 125 being at the center of the bell curve. The overall scale is 472-528, with 500 at the center of the bell curve. They chose to center the scale at 500 since their national data with the current exam shows that students at the center succeed in medical school. The score report will include total score, section scores, percentile ranks, confidence band, and score profile showing strengths and weaknesses. They will be emailing the percentile rank tables and posting on the website as scores start to come in and updating that annually. There will be no direct comparison of MCAT2015 scores to current MCAT scores.