# PREMED (M.D. and D.O.) INFORMATION SUMMARY

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## ACADEMIC PREPARATION

Academic preparation for medical school requires a Bachelor’s degree and completion of a set of prerequisite classes, usually science, which vary from school to school. The most common classes are outlined on the final page of this Summary. For your degree, any major is appropriate. There is no preference in this regard, so study something you love!

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## EXTRACURRICULAR ACTIVITIES

Preparation for medical school involves engaging in experiences that develop and demonstrate skills in communication, leadership, community service, research, and familiarity with the medical profession. What you do outside of class is as important as what you do in class so don’t neglect these activities. Keep in mind that activities complement your coursework, but will not compensate for low grades. Both are important!

### Hobbies

Medical schools are interested in well-rounded students who know how to balance work with recreation. Recreation activities, including hobbies, athletics, and other pastimes, will help you relieve stress and return refreshed to your studies in both undergraduate and in medical school.

### Physician Shadowing

This should be one of your first experiences as a premedical student. Observing a physician in action will help you gather the information you need to fully commit to the profession and to learn about a variety of medical specialties. Many students find physicians to shadow through volunteer experiences at medical facilities. It is a good idea to shadow both M.D and D.O. doctors.

**Competitive applicants shadow 3-5 different physicians, spending at least 8-10 hours with each, and have a good balance between primary care and non-primary care physicians.**

### Community Service (LOR)

Because you are preparing for a humanitarian profession, it is important to have volunteer experiences that demonstrate a commitment to serving others in your community. It is suggested that this be ongoing throughout your college years prior to application for admission. **Competitive applicants complete 3 different experiences each lasting 6 months to a year in the 4 years before they matriculate.**

- Lowell Bennion Community Service Center ([http://bennioncenter.org](http://bennioncenter.org))

### Leadership Experience

As a physician, you will be a leader and team member in many ways – with your patients, your staff, your colleagues, and in your community. Examples include offices held in organizations, committee work; leadership in church activities; coordinating a project; managing, training, supervising at work or in other activities; teaching experience of any kind; coaching; peer counseling or mentoring, etc.

**Competitive applicants complete 3 different experiences each lasting 3 months or longer in the 4 years before they matriculate.**

### Patient Exposure (LOR)

Interacting well with patients is one of the key indicators of a successful future provider. Your experience can be either paid or unpaid. It may or may not require certification. Examples include ER volunteer, nursing home, hospice and more.

**Competitive applicants complete 1-2 different experiences each lasting at least 6 months to a year, total of 100+ hrs.**

### Medical School

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### Research Experience (LOR)

Physicians depend on medical literature to remain current in their field throughout their careers. Most medical schools highly recommend participation in research. The UUSOM requires a research experience that tests a **hypothesis**. Your research experience can be from many different areas. It does not have to be medically related or in a lab.

**Competitive applicants complete at least 1 experience under a supervision of a faculty lasting 6 months to a year.**

- Undergraduate Research Opportunities Program (UROP) ([http://our.utah.edu/](http://our.utah.edu/))
- My Undergraduate Signature Experience (MUSE) ([http://muse.utah.edu/](http://muse.utah.edu/))

### Things to Remember

- Make sure you have contact information for supervisors and physicians you work with or shadow in case you need a recommendation letter. Try to keep an open relationship with them after you discontinue activities.

- Keep a record of all hours of service and experiences. The **Premed Planner Spread Sheet** on our website can help with this. You will find it under Available Downloads.

- Writing reflections on each activity in a journal will be helpful when you write your personal statement.
APPLICATION TIMELINE

<table>
<thead>
<tr>
<th>TIMELINE</th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
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<td>Application</td>
<td>Prep</td>
<td>Write draft of Personal Statement</td>
<td>Secondary Applications</td>
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<td>Application deadlines</td>
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<td>- Research Schools</td>
<td>- Submit applications the first week of June at the earliest</td>
<td>Interviews</td>
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<td>Oct.-Nov. for MD</td>
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<td>Application deadlines</td>
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<td>Dec.-March. for DO</td>
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THE MCAT

- The MCAT is administered in January, and March through September.
- Taking the exam by spring will enable you to apply earlier. September is the last MCAT accepted by many schools for the following Fall entering class.
- The MCAT is divided into four multiple choice sections: Biological and Biochemical Foundations of Living Systems, Chemical and Physical Foundations of Living Systems, Psychological, Social and Biological Foundations of Behavior, and Critical Analysis and Reasoning Skills. You can obtain the most updated information from [https://www.aamc.org/students/applying/mcat/mcat2015/](https://www.aamc.org/students/applying/mcat/mcat2015/).

THE APPLICATION PROCESS

- US medical schools admit students once a year in the Fall
- Applications are submitted 12-15 months before your desired medical school enrollment date. This means the application process can begin as early as the spring after your Junior year. However, the timing depends on when you will complete your degree and the necessary premedical coursework (and successfully take the MCAT). All degrees must be posted to your transcript prior to starting medical school, and the timing is sensitive.
- While applying early in the cycle has advantages, the best time for you to apply is when your application is the best it can be.
- You can apply to both M.D. and D.O. schools! In fact, we encourage students to consider doing so.
- Medical schools requirements vary from school to school. Research schools early for specific information about requirements.
- There are three centralized application services processing primary applications for US medical schools: AMCAS for MD schools, AACOMAS for DO schools, and TMDSAS for schools in the University of Texas system. These services are very similar, but not identical. They open online in early May each year to allow applicants to start building applications, and begin accepting submissions on or around June 1st. Refer to the chart on page 3 for additional information.
- There are a handful of private schools not affiliated with any of these centralized services and require other applications. Information is available on each school’s website.
- Before submitting applications, have people with an unbiased eye go over each entire application to catch any errors.
- To help us advise other students, we would appreciate it if you would release your statistical information from your applications to the Health Professions Advisor when prompted. This information will always be kept confidential.
<table>
<thead>
<tr>
<th>Application Comparison</th>
<th>TMDSAS—U of TX</th>
<th>AMCAS—MD</th>
<th>AACOMAS—DO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Application Fee: # of schools included</td>
<td>Flat fee includes all schools, but <strong>no fee waivers</strong></td>
<td>1 school included in fee, Extra fee for each additional</td>
<td>1 school included in fee, Extra fee for each additional</td>
</tr>
<tr>
<td>Add additional schools after submission?</td>
<td>Yes—No additional charge</td>
<td>Yes—Additional charge</td>
<td>Yes—Additional charge</td>
</tr>
<tr>
<td>Personal statement length</td>
<td>1 required, 5000 char limit 2 optional, 2500 char each</td>
<td>1 required, 5300 char limit</td>
<td>1 required, 4500 char limit</td>
</tr>
<tr>
<td>Extracurricular experience listings</td>
<td>Chronological list of all info since HS graduation (academic, extracurricular, employment, etc.)</td>
<td>May list up to 15 activities 700 character limit each Designate 3 ‘significant’</td>
<td>May list all activities 600 character limit each</td>
</tr>
<tr>
<td>Official MCAT Score Report</td>
<td>required</td>
<td>required</td>
<td>required</td>
</tr>
<tr>
<td>Official transcripts</td>
<td>TMDSAS form required</td>
<td>AMCAS form required</td>
<td>AACOMAS form required</td>
</tr>
<tr>
<td>GPA calculations*</td>
<td>Unique calculation with no decimals</td>
<td>Total, BCPM, and AO</td>
<td>Total, BCP, and AO</td>
</tr>
<tr>
<td>Early application advantage?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Deadlines?</td>
<td>October 1</td>
<td>By school, mostly Oct or Nov</td>
<td>By school, mostly Dec-Apr</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://utsystem.edu/tmdsas/">utsystem.edu/tmdsas/</a></td>
<td><a href="http://www.aamc.org">www.aamc.org</a></td>
<td><a href="http://www.aacom.org">www.aacom.org</a></td>
</tr>
</tbody>
</table>

*Total = Total GPA, BCPM = Biology, Chemistry, Physics, Math (Science) GPA, AO = All Other (Non-Science) GPA

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**LETTERS OF RECOMMENDATION**

- Once a medical school receives your primary application through the application service, the school will request supplementary materials, including program specific secondary applications and Letters of Recommendation (LORs).
- **Application services do not share letters:** Be sure to plan ahead regarding where to have your letters sent.
  - Applicants who plan to apply **only** to AMCAS, AACOMAS, or TDMSAS affiliated medical schools most often take advantage of the Letter Service provided by those systems.
  - If applying to both MD and DO schools, or including TMDSAS schools, unaffiliated schools, or an international program, it is easiest to subscribe to a service like Interfolio ([interfolio.com](http://interfolio.com/)) which allows you to collect all your letters in one place and have them sent to each application service.
- Do not delay submitting your primary application while waiting for letters to arrive. Letters are part of the secondary process.
- Requirements for letters vary between schools, so research schools early and know what you need. The following is based on the UUSOM’s requirements, and generally covers the types of letters you will need. Plan ahead! Get to know people from these categories so you will have a variety of people who can write excellent letters for you.
  1. **Science Professor** (BCPM)
  2. **Non-Science Professor OR 2nd Science Professor** (Requirements vary by school)
  3. **Mentor letter—Usually a Supervisor for Research, Patient Exposure, Community Service, or Employment**

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**PREMED GENERAL POLICIES REGARDING COURSEWORK**

<table>
<thead>
<tr>
<th>CLEP Credit &amp; Correspondence Study</th>
<th>Not acceptable as part of the premed curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Credits</td>
<td>Generally, students must take coursework beyond introductory classes waived by AP</td>
</tr>
<tr>
<td>“Online” Courses</td>
<td><strong>Online sections</strong> of semester based university classes, or online/in person hybrid sections of semester based classes will usually be accepted. <strong>Online courses which are not university semester based (independent study) will generally not be accepted.</strong></td>
</tr>
<tr>
<td>Repeat Policy</td>
<td>All grades for repeated courses will be counted towards your GPA on your medical school application through AMCAS, AACOMAS, and/or TMDSAS</td>
</tr>
<tr>
<td>Withdrawals</td>
<td>W’s should be used only for emergencies, although W’s will not affect your GPA.</td>
</tr>
<tr>
<td>GPA</td>
<td><strong>Generally</strong> the minimum GPA for Total, Science, and AO is 3.0, but may be higher or lower depending on the school. The average GPA for accepted applicants is usually in the 3.6 range for MD schools and 3.5 range for DO schools. UUSOM recommended minimum is 3.2, and average is around 3.6.</td>
</tr>
</tbody>
</table>
**Premedical Course Guide**

This guide is designed for applying to a range of medical schools. It is not a comprehensive list. Requirements may vary by school. Shading indicates the classes most commonly required by medical schools. See a PPA advisor for more information.

[Classes with * may be taken at a Community College. However, not all medical schools accept prerequisites from 2 year schools]

<table>
<thead>
<tr>
<th>BIOLOGY</th>
<th>CHEMISTRY</th>
<th>MATH</th>
<th>PHYSICS</th>
<th>NON-SCIENCE</th>
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<tbody>
<tr>
<td>*1610 (3) Fundamentals of Bio I 1615 (1) Lab</td>
<td>OPTIONAL preparatory courses for CHEM, MATH, and PHYS:</td>
<td>*1050 (4) &amp; *1060 (3) College Algebra &amp; Trigonometry (Prereq: MATH 1010) Can be substituted with 1080 (5) or 1210 (4)</td>
<td>Physics has 2 options. Consult with both your major advisor and a PPA advisor to choose the right sequence. [NOT waived by AP Physics]</td>
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</tbody>
</table>
| Formerly BIOL 1210 | • Math Boot Camps, MATH 10 or MATH 15  
• Chemistry Boot Camp CHEM 10  
• CHEM 1200 (3) Prep for College Chemistry  
• CHEM 1208 (1) Intro to Periodic Table  
• CHEM 2308 (1) Intro to O-Chem | *1210 (4) Calculus I Recommended by some schools (Prereq: MATH 1050 & 1060 or 1080)  
*1220 (4) Calculus II (Prereq MATH 1210) may be required by a few schools. | 2 Writing Classes [NOT waived by AP]  
WRTG 2010 (3) Intermediate Writing (Prereq: WRTG 1010) & Upper Division Writing (CW) (Prereq: WRTG 2010) |
| *2325 (4) Human Anatomy (Recom. Prereq: BIOL 1610) Fulfills BIOL lab requirement for most M.D & D.O. schools | *1070 (3) Statistics (Prereq: B or higher in MATH 0980, B or higher in MATH 1010 or 1030)  
Recommended by many med schools. Can be substituted with PSY 3000, FCS 3210, or other statistics course. | 2010 (4) Gen. Physics 1 2015 (1) Lab (Prereq: MATH 1060)  
2210 (4) for Scientists & Engineers 1 2015 (1) Lab (Prereq: MATH 1210) | Arts/Humanities (FF/HF) |
| *2420 (4) Human Physiology (Prereq: BIOL 1610 & CHEM 1210) MCAT prep | *1210 (4) Gen Chem 1 1215 (1) Lab (Prereq: MATH 1050) [NOT waived by AP Chemistry] | 2010 (4) Gen. Physics 2 2025 (1) Lab (Prereq: PHYS 2010)  
2220 (4) for Scientists & Engineers 2 2025 (1) Lab (Prereq PHYS 2210 & MATH 1220) | Behavioral Science (BF) |
| 2020 (3) Cellular Biology (Prereq: BIOL 1610 & CHEM 1210) Fulfills 2nd General Bio | *1220 (4) Gen Chem 2 1225 (1) Lab (Prereq CHEM 1210) | *2220 (4) for Scientists & Engineers 2 2025 (1) Lab (Prereq PHYS 2210 & MATH 1220) | Optional Behavioral Science for MCAT Prep |
| 2030 (3) Genetics OR (Prereq: BIOL 2020)  
Genetics (Prereq: BIOL 1610) Recom. by many D.O. schools | 2310 (4) O-Chem 1 2315 (2) Lab (Prereq CHEM 1220) | 2320 (4) O-Chem 2 2325 (2) Lab | * FCS 1500 (BF) Lifespan Hum. Development  
* FCS 3290 (HFDV) Ethnic Minority Families  
* PSY 3040 (DV) Psychology of Gender  
* SOC 3650 (IQRBQI) Population & Society  
* SOC 3673 (QBQI) Social Epidemiology  
* ECON 3190 Intro to Health Economics  
* ANTH 1010 (BF) Culture & the Hum. Exp. |
| 2210 (3) Human Genetics (Prereq: BIOL 1610) | 2320 (4) O-Chem 2 2325 (2) Lab |  |  |
| 2220 (4) for Scientists & Engineers 2 (BF) |  |  |  |
| BIOL/ CHEM 3510 (3) Biochem I (Prereq: CHEM 2310) CHEM 2320 & BIOL 2020 recom. |  |  |  |
| MCAT prep |  |  |  |
| 2 Biology Labs: BIOL 1615 and either the Anatomy OR Physiology lab will fulfill this for most schools. The 2nd lab can also be fulfilled by other biology labs such as BIOL 1625, 3115, 3205, 3235, 3515, 3525 or others. Please note that some of these labs require the corresponding course. Labs at SLCC may also be acceptable. |  |  |  |

**OPTIONAL exploration courses:**

- UGS 1020 (1): Introduction to Premed.
- LEAP 1100+1101 (3+3): College of Health LEAP
- H EDU 2010 (3): Introduction to Health Professions
- FPMD 5005 (3): Intro to Medical Professions
- PED 5900 (1-4): Clinical Research Methods I. (Begins sequence for Pediatric Clinical Research Minor)