Academic Preparation for Medical School

Your premedical preparation commences with your first advisement with the advisor in the Office of Medical & Allied Health Programs. This should set the pace and tone for your next four – five academic years. Aside from taking the appropriate courses and making good grades, you must also prepare for the Medical College Admission Test (MCAT) and the medical school application process. This guide is offered as a temporal guide to that preparation and the opportunities and services the Office of Medical & Allied Health Programs (MAHP) offer premedical students.

Medical schools will usually assess six basic factors to judge performance in college and other qualifications for admission. These factors are residence status (preference given to Texas residents), cumulative grade point average (GPA) and the Science GPA, Medical College Admissions Test (MCAT) scores, a completed application form including the evaluation(s) submitted by the health professions advisor or advisory committee, and a personal interview.

State Residence

Texas State law determines the enrollment of non-Texas resident applicants to be 10% of the entering class of Medical and Dental schools that receive state funding. Consequently, Texas residents are given admission preference and pay a more favorable resident tuition. You must be a Texas resident at the time of your application to be eligible for the Texas resident applicant pool and resident tuition. The Texas Higher Education Coordinating Board’s Residency Status Rules and Regulations for determining residency may be found at: www.utexas.edu/student/admissions/residency

Academic Performance

The GPA is a factor in evaluating academic performance. Also considered are consistency of grades, performance in required courses, course load per semester, the number and academic rigor of the colleges and universities attended, discrepancies between GPA and MCAT scores, and social, economic and/or educational background.

Transcripts of all coursework and grades must be submitted to each of medical programs you are making application. This is best facilitated through an application service such as the Texas Medical and Dental School Application Service (TMDSAS) for Texas state medical programs, including veterinary medicine. The American Medical College Application Service (AMCAS) provides your application information to programs outside of Texas. In addition, a complete set of official transcripts must be provided, prior to enrollment, to the medical school to which you are accepted. The GPA will be a composite of all college work at all colleges attended and will be calculated by year, overall courses, and science courses. All grades will be used in the calculations, regardless of whether courses were repeated. The grades will be converted to a
The Medical College Admission Test (MCAT)

The MCAT is administered by the American Association of Medical Colleges (AAMC). You are advised to obtain a copy of ‘MCAT Essentials’ for the year you intend to complete the exam from the AAMC website at: [www.aamc.org/students/mcat/start.htm](http://www.aamc.org/students/mcat/start.htm).

The MCAT is a secure, non-disclosed standardized test. All U.S. and most Canadian medical schools require applicants to submit recent MCAT scores during the application process.

The MCAT is an half-day test of approximately five and one-half hours (including breaks) that assesses your mastery of basic concepts in biology, general and organic chemistry, and physics; your facility with scientific problem solving and critical thinking; and your writing skills. The test is administered in four sections: Physical Sciences, Verbal Reasoning, Biological Sciences, and the Writing Sample.

- **The Physical Science** (PS) section assesses problem solving in general chemistry and physics.

- **The Verbal Reasoning** (VR) section assesses the student’s ability to understand, evaluate, and apply arguments presented in prose passages. This section consists of seven passages, each about 600 words long, taken from the humanities and social sciences, and from areas of the natural sciences.

- **The Biological Sciences** (BS) section assesses problem solving in biology and organic chemistry. Each of these sections consists of 7 to 9 passages, each about 250 words in length that describe a situation or problem. Each passage is followed by 4 to 7 multiple choice questions.

- **The Writing Sample** (WS) section assesses skill in developing a central idea; synthesizing concepts and ideas; presenting ideas cohesively and logically; and writing clearly using accepted practices of grammar, syntax, and punctuation consistent with timed, first-draft composition. It consists of writing two 30-minute essays on a specific topic that requires an expository response.

Numerical scaled scores are used for reporting MCAT exam performance and they range from a low of 1 to a high of 15 for each of the three multiple-choice sections of the test (VR, BS, and WS). Referring to the total points on the MCAT is less than meaningful. As an example, consider two students with total MCAT scores of 28. One has a 9 in both PS and BS and a 10 in VR. The other has a 12 in both PS and BS and a 4 in VR. The medical school admissions committee would undoubtedly view these two applicants, relative to their MCAT scores, very differently.

The Writing Sample is scored on an alphabetic scale ranging from J (lowest) to T (highest). Each
letter represents the sum of the two raw scores on each of the two Writing Sample topics. The 50th-percentile alphabetic score is O.

Scaled score means and standard deviations for each section, percentages of students receiving each scaled score, and percentile rank ranges are provided to students with their MCAT score reports so they may compare their performance to that of other students.

The mean total MCAT score for those students accepted to medical schools in Texas during the last several years has been well above the national mean of applicants. The Medical & Allied Health Programs office can counsel you regarding your MCAT score and whether you should retake the MCAT. Applicants with high total MCAT scores and GPAs have a high likelihood of being interviewed by medical school admissions committees.

Preparation for the MCAT, and for your application to medical school begins in earnest at the beginning of your junior year or one year before your graduation from Sam Houston State University. By the end of your sophomore year, you need to have completed your basic science courses. These science courses must be science major credible and include, but not limited to, eight hours of biology, chemistry, physics and organic chemistry; four hours of calculus; and six hours or English composition. If you have not yet completed these courses by the beginning of the Fall semester of your Junior year, you are advised to complete your baccalaureate degree on a five year rather than a four year schedule. The determination of your ‘Junior Year’ is not dependent upon the total number of hours you have completed but is considered to be the year you intend to make application to medical school.

In the Fall semester of your Junior year (the year of your application to medical school) you must complete several forms available from Office of Medical & Allied Health Programs (MAHP) to initiate your application file. These forms provide for the assembly of your medical school evaluation dossier and include:

- Background Check Authorization

Additionally, you will be asked to provide the following information:

- A formal, signed letter to the Director, Medical & Allied Health Programs requesting the assembly of appropriate evaluative data for application to professional school (this must be provided as a hard copy, since it must be signed),

- A listing of all professional schools to which you will make application, including the complete mailing addresses, or an acknowledgement that your are utilizing one of the application services, such as TMDSAS or AMCAS. When using an application service, you must provide your service ID# and the
Letter ID# for a composite letter from Sam Houston State University.

- The names and campus addresses of five (5) faculty members who are willing to provide an evaluation of your work. Three (3) of these faculty may be from the departments of your major and minor (all three may not be from the same department). Submission of a faculty evaluator's name implies you have personally contacted them and they have agreed to provide this office with an evaluation for professional school. It is advisable to select evaluators who know you and who can speak to both your personal and academic qualities. The evaluators you choose should represent a wide academic diversity and not all from the sciences. Your evaluators must hold a terminal degree (PhD, MD, DDS, etc.),

- A professional résumé including a BRIEF autobiography is required. This should provide your place and date of birth, hometown, education (including dates), chronological listing of your work experiences, and exposure as a volunteer or paid worker in a health profession, development of your interest in your chosen professional discipline, hobbies, extracurricular activities, and honors. Your résumé should include a chronological accounting of all academic and extracurricular activities during high school and college (scholarships, honors, awards, participation in school organizations, work with volunteer organizations, community involvement, work on campus as a laboratory assistant, etc.). Essentially, you should itemize anything you feel pertinent to your evaluation. This is a professional document, reflecting careful preparation. A color or black/white photo (2.50" x 3.25") is to be a part of your résumé and placed in the upper right corner of the first page. Be sure to construct your resume in such a manner so the picture does not obscure any information,

- Prepare a brief statement (approximately one-two type written page) suggesting why professional schools should be interested in you as a potential student. What do you bring uniquely to the medical science-arts that is particularly worthy of consideration. Include any pertinent information which has helped in your decision to attend professional school,

- One current OFFICIAL transcript of ALL college work from each college or university attended,
• An official copy of your MCAT scores. The copy of your MCAT results as provided by AAMC is appropriate. The student will need to take the spring (April) MCAT for early fall semester consideration by the SHSU Medical/Dental Student Evaluation Committee (MDSEC). Applicants who elect to take the MCAT in the fall of their year of application to professional school cannot be assured of a timely review by the screening committee. Students who are retaking the MCAT will be evaluated on the basis of their existing scores, and

• All review materials from the applicant must be in the Office of Medical & Allied Health Programs no later than May 15th of your Junior Year in order to assure timely assembly, evaluation, and submission of the applicant dossier.

The Sam Houston Writing Center, located in Farrington 111 features a highly trained staff of English faculty and graduate and undergraduate students from a variety of majors, including English, psychology, history, forensic chemistry, music, foreign languages, and criminal justice. They have offered to provide tailored assistance to the Health Professional Student to become better writers and develop confidence in their writing skills. This will be beneficial to not only your writing skills on the MCAT, but also provide assistance in developing your essays for the SHSU evaluation committee as well as for the medical school application. To this end, the Writing Center offers one-on-one tutoring sessions and small group writing instruction for the health professional students of Sam Houston State University. The writing center tutors will not only help you correct your writing, but are trained to provide a learning experience for prewriting, revising, and editing skills. To contact the Writing Center for help you are directed to: telephone (936) 294-3680, fax (936) 294-3560, email wcrt@shsu.edu, website www.shsu.edu/~wctr.

Careers Services, located in AB IV, Ste. 210, can also provide you assistance in preparing your résumé and cover letter. You may schedule an appointment to have your resume critiqued by a member of their professional staff or for your convenience they offer a "drop-off" service. Be sure to identify yourself as a premedical, predental, or other health professional student when you leave your résumé and or draft cover letter at the front desk and they will call you to pick it up after it's been critiqued! Career Services welcomes drop-ins but to avoid having to wait for an available staff member, it is recommended that you call for an appointment. To contact Career Services for assistance, you are directed to: telephone (936) 294-1713, fax (936) 294-3616, email careerservices@shsu.edu, website www.shsu.edu/~ccp.

The Medical School Application

There is a common electronic application for the state-supported medical and dental schools in Texas. Application is made to the Texas Medical and Dental Schools Application Service (TMDSAS) at www.utsystem.edu/tmdsas. Application to Baylor College of Medicine is made to the American Medical Colleges Application Service (AMCAS) at www.aamc.org/amcas. Poorly or incorrectly prepared application forms can cause delays in action on the application and may
influence initial screening or later consideration of the application. Following these hints can reduce the likelihood of a sloppy or inaccurate form.

- **Budget sufficient time.** Underestimating the amount of time required to prepare applications is almost inevitable. It is a tedious and time-consuming process.

- **Use transcripts.** Obtain an unofficial transcript from each college or university attended. Use these transcripts when recording your course information on the application; this will help to ensure accuracy of information. Also, be sure to request that official transcripts from all colleges and universities attended be sent to the application service.

- **Photograph.** The filing fee for the web application is mailed with photographs to TMDSAS via return receipt mail. Although the photographs need not be studio portraits, they should be appropriate and professional in nature. For example, an informal snapshot taken at a costume party would not be appropriate nor are ‘glamor shots’; the selection of these types of photos might be interpreted as immature or unprofessional.

- **Be honest.** Do not "pad" the list of extracurricular activities and a vocational interests in an effort to create an image. For example, if you list accomplishments in chess on an application but cannot discuss the pros and cons of basic opening moves during an interview, you may make an impression, but probably not the intended one.

- **Personal statement.** The personal statement of the application is EXTREMELY important. It should contain a logical, coherent statement that demonstrates maturity, good judgment, sincerity, and a realistic view of a medical career. This is also a good place to indicate motivation about a long-standing commitment, career goals, etc. Any previous work or volunteer experience with people, such as in a hospital, clinic, or research laboratory, shows an interest in and knowledge of medicine as a career and should be included. It is here that you can express your individuality and you should not be unduly modest.

- **Classifying courses as science or non-science.** When decisions must be made as to whether a specific course is science or non-science, check with your advisor. Generally, professional courses in nursing and the allied health sciences are considered sciences. Physical anthropology, psychobiology or behavior, and similar courses are more difficult to assign, but the way they are viewed on the campus where they are taken may serve as a guide. Are they considered science or non-science courses in the liberal arts degree program, for example?

- **Proofread carefully.** Print a copy of the completed application and any
secondary applications and review them for accuracy before submitting them to the application service. Spelling, grammatical, and typographical errors should obviously be corrected. Even with an electronic application, if you do not take care to see that your application is in good form, it may be assumed that you might not be concerned about details associated with good patient care. Further, more than one applicant has been embarrassed by having expressed a strong interest in professional school "A" on professional school "B's" supplemental application.

- **Keep a copy of the completed application.** It is a good idea to print a copy of the application before submitting it. Such copies are helpful in completing other applications but also in refreshing your memory before an interview.

- **Check your eligibility for an application fee waiver.** Although TMDSAS does not grant application fee waivers, the professional school may. If you are receiving financial aid at your undergraduate school, you may be eligible for a waiver of part or the entire professional school application fee. A letter from a financial aid officer may be needed to document sufficient financial need.

- **Check that you have completed the TMDSAS or AMCAS on line application to allow the Health Professions (HP) evaluation to be uploaded.** This involves providing the Medical & Allied Health Profession Program office with not only your TMDSAS and/or AMCAS personal Identification Number, but also the appropriate Letter Identification Number.

- **Periodically check on the status of your application.** Make sure that the application service has received all of the required information. It is the applicant’s responsibility to ensure that his/her application is complete.

### Health Professions Evaluation

In addition to your MCAT scores and college transcript(s), your TMDSAS application will request a written evaluation submitted by the Medical & Allied Health Program’s student evaluation committee. Sam Houston State University is considered to be a ‘Committee School.’ Absence of a Committee review and University endorsement can, and has, raised a question as to why a Sam Houston University applicant might choose not to seek Committee review.

When the Office of Medical & Allied Health Program (MAHP) receives your résumé, essay, and transcript(s), the documents will be sent to each of the faculty members selected as evaluators with a cover letter requesting a letter of evaluation on your behalf. This letter must be returned to MAHP in a sealed envelope. You will be notified when your dossier is complete and ready for evaluation by SHSU Medical / Dental Student Evaluation Committee.

Our university is a ‘Committee’ school. At least three members of the SHSU Medical / Dental Student Evaluation Committee (MDSEC) will evaluate your credentials and letters of evaluation to provide a recommendation for University endorsement of your application to medical school.
The MDSEC will rank your dossier into one of five evaluative categories. Those evaluation categories are as follows:

A. **RECOMMENDED WITH HIGHEST CONFIDENCE**
   This category is reserved for those applicants whose combination of paper credentials and observable personal characteristics, in our judgment, makes them not only *qualified and competitive* for admissions, but also represents them as truly *exceptional* applicants.

B. **RECOMMENDED WITH CONFIDENCE**
   This category describes those applicants whose combination of paper credentials and observable personal characteristics, in our judgment, makes them both *qualified* and *competitive* for admission.

C. **RECOMMENDED**
   This category describes those applicants whose combination of paper credentials and observable personal characteristics in our judgment makes them *qualified* for admission.

D. **RECOMMENDED WITH RESERVATION**
   This category describes those applicants whose paper credentials or observable personal characteristics in our judgment, makes them *weakly qualified* for admission (e.g., a student with superior grades and admission test scores, but with obvious immaturity, social maladjustment, or other traits likely to be incompatible within professional program or practice).

E. **NOT RECOMMENDED**
   This category describes those applicants whose combination of paper credentials and observable personal characteristics, in our judgment, renders them *unqualified* for admission.

Applicants who are endorsed by a majority vote of the MDSEC in any one of the top three categories (A-C) will have a committee evaluation letter written and the student’s evaluation dossier will be submitted to the medical school or medical school application service, as appropriate. The MDSEC will not vote higher than ‘Recommended’ or category C, for applicants lacking, or failing to disclose their MCAT scores. Students whose medical school credentials are evaluated by a majority of the MDSEC as ‘Recommended with Reservation’ or ‘Not Recommended’ will be given the opportunity to withdraw their request for University endorsement. A student must submit a signed request to withdraw from Sam Houston State University’s medical school applicant review process. The student may independently apply to medical school without a University endorsement. None of the documents within the student’s official university dossier will be provided to the applicant. Any inquiry concerning the absence
of the MDSEC’s endorsement will be responded with the statement, “The Medical / Dental Student Evaluation Committee chose not to enter an opinion at this time.”

**Interview**

An interview is required prior to a student's acceptance into medical school. An applicant may be invited (from August through December) to interview with one or more Medical School Admissions Committee. Invitations for an interview are usually based on your GPA, MCAT score, and personal statement. The Committee will assess non-cognitive factors such as communication skills, extracurricular activities, volunteerism, undergraduate research, and motivation for a career in medicine during your visit with one or more designated interviewers. After your interview, the admissions committee will consider your acceptance based on the above information in addition to the results of the interview and the letters of evaluation.

**MCAT Preparation**

The Medical College Admissions Test, MCAT, is required for admission to all Texas and most all other medical schools. The exam must be taken no earlier than April 2006 and no later than September of the year preceding enrollment into medical school (i.e. if you are applying for entry year 2012, September 2011 is the last month you can take the MCAT). No score from a test taken within the year of enrollment will be accepted. Scores from years prior to 2006 will not be considered.

Your MCAT score is the single most influential factor for admission to medical school. Your MCAT preparation must be given the appropriate attention. To facilitate your preparation, MAHP and the Kaplan Test Prep and Admissions have elected to use a new approach to studying for the MCAT. To address the challenges students face on the MCAT, especially in regard to Verbal and Passage-based Questions, the MCAT program has been restructured to provide instruction that is focused on critical thinking and verbal reasoning. The following outlines a two phase program that commences at the beginning of the Fall semester and concludes at the end of April (Spring semester) in time for the May administration of the MCAT.

**PHASE I**

Kaplan will provide classroom instruction designed to improve critical thinking, verbal ability, and reading comprehension (speed, vocabulary).

- Diagnostic Exam (half length practice test) will be administered during the fall semester,
- Suggested classroom activities and assignments include articles from current scientific journals, and
- A Science Assessment will be administered at the conclusion of this phase, in addition to a Verbal Reasoning Section Test to assess improvement through Phase I.

**PHASE II**
Kaplan will provide our MCAT Classroom Course, which will guide students as they incorporate the skills listed above with the science that is tested on the exam.

- Students will be required to complete required online assignments accessible through a personalized online syllabus.

- Smart Reports, a customized report based on individual performance on subject tests, full-length exams, etc, will be provided to each student through the online syllabus. Each student will be required to print these reports and provide to the MAHP Director monthly for discussion and guidance.

- Phase II will begin in the spring semester to prepare students for [April/May/June/July] test dates. April or May is preferred so that your application will be completed and into the applicant pool for the start of the interview season. The interview season generally begins at the end of August and closes in early December. Applicants who wait to take the MCAT examination for the first time in July, August or September may find action on their application delayed until late in the admission season.

Students will be held accountable for class attendance and homework, as these are critical to the success and continued progress of the student.

Presuming a student is successful in their application process and has received an invitation for a medical school interview, you have attained the first level of acceptance; the medical school is acknowledging that you have met the admission requirements. Your admission to the medical school now hinges on how well you present yourself in the interview setting. Just as you should not attempt the MCAT without preparation, it would be just as foolish for you to attempt your interview without some groundwork.

Career Services in conjunction with the Office of Medical & Allied Health Programs will provide a series of events that offer coaching on those professional details that matter. Since you never get a second chance at a first impression, you do not want the first impression to be good, you want it to be GREAT! The first judgment an interviewer makes is going to be based on your appearance and what you are wearing. One-on-one tutoring by the staff of Career Services, reference library materials, and lecture based programs with topics such as, “Interview Attire on a Budget” and “What Not to Bring to an Interview” from notable and popular fashion establishments, exposes medical school applicants to basic professional etiquette. In order to prepare for medical school interviews, you can now practice your interview skills and receive technical critique for improvement. Mock interviews can be scheduled to identify strengths and weakness to better prepare you for the medical school review. Video taping of mock interviews provides a record of your progress as well as a method of self evaluation.

To contact Career Services for assistance, you are directed to: telephone (936) 294-1713, fax (936) 294-3616, email careerservices@shsu.edu, website www.shsu.edu/~ccp.
Just a Reminder …

Your application to Texas medical schools can be effectively addressed through the Texas Medical and Dental School Application Service (TMDSAS). A corresponding program for most U.S. participating medical schools is the American Medical School Application Service (AMCAS). The American Association of Colleges of Osteopathic Medicine (AACOM) operates AACOMAS, a centralized application service for the 25 osteopathic medical schools. The ACOMAS, is a centralized application service for the osteopathic medical schools.

The TMDSAS simplifies the application process for both the applicants and the participating schools. A single standardized application, relieves students of the need to complete a separate application for each of the participating schools. The schools participating with TMDSAS benefit by receiving a uniform dossier on all applicants. TMDSAS does not render any admission decisions. Each participating school is completely autonomous in reaching its admissions decisions. TMDSAS provides only the application processing service.

TMDAS Participating Medical Schools:
- UT Southwestern Medical Center in Dallas
- UT Medical Branch at Galveston
- UT School of Medicine at San Antonio
- UT Health Science Center in Houston
- Texas A&M Health Science Center, College of Medicine
- Texas Tech University Health Sciences Center School of Medicine
- University of North Texas-Texas College of Osteopathic Medicine
- Texas Tech University Health Sciences Center Paul L. Foster School of Medicine at El Paso

TMDAS Participating Veterinary Medical Schools:
- Texas A&M University College of Veterinary Medicine

AMCAS Participating Texas Medical School:
- Baylor College of Medicine

TMDSAS
702 Colorado Street, Suite 6.400
Austin, Texas 78701
512-499-4785
tmdsas@utsystem.edu

AMCAS
2450 N Street, NW
Washington, DC 20037-1126
202-828-0400
www.aamc.org
Application Timeline

A. Junior year… the year of application.
   1. Take MCAT in April.
   2. Complete information for the Office of Medical & Allied Health Programs (MAHP).
   3. Submit on-line application to TMDSAS and / or AMCAS as soon as application service starts to take applications.

B. Summer between Junior and Senior years.
   1. Check with MAHP to be sure the Medical/Dental Student Evaluation Committee has completed their review.
   2. Check to be sure MAHP has received all of your ID# to submit the committee evaluations to TMDSAS and AMCAS.
   3. If necessary, retake the MCAT.

C. Fall of Senior year.
   1. Interview at medical schools.

Suggested Reading

Following may be useful in preparing for medical school. Please realize that new books and other materials are continuously being published and prices are subject to change. The Careers Center, the University Writing Center and the Office of Medical & Allied Health Programs may have recent publications that may be helpful.

- *Medical School Catalogs*. These may be accessed through the MAHP office or by visiting a medical school’s web site. The following publications are available from the National Association of Advisors for the Health Professions at NAAHP, PO Box 1518, Champaign, IL 61824-1518; (217) 355-0063. [www.naahp.org](http://www.naahp.org)


- *Interviewing for Health Professions Schools*. $6.00.


There are a large number of useful publications including MCAT Practice Tests available from the Association of American Medical Colleges website [www.aamc.org](http://www.aamc.org). Two worth mentioning are:

- *Medical School Admissions Requirements United States and Canada* (revised annually).
- *Minority Student Opportunities in United States Medical Schools*. Provides information to underrepresented minorities (Blacks, Hispanics, Native Americans) applying to medical school.