

Guide for Pre-Medical Education at Northwest Nazarene University



This booklet is addressed to the student in the first person "you" to emphasize that the premedical student, especially during the college years, is responsible for his or her education and for preparing to enter medical school. The advisors at NNU want you to know we will do everything we can do to help you accomplish your goal of entering medical school, but we wish to emphasize the responsibility placed on you, the student. Medical schools are interested in students who are accountable and responsible.

This booklet contains the best generic advice we have based on the published information available and on feedback from NNU students in medical programs. We would like to help you to begin taking responsibility through the information provided in this booklet.

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PRE-MEDICAL EDUCATION AT NORTHWEST NAZARENE UNIVERSITY

FORWARD:

These pages prepared for you, the pre-medical student at Northwest Nazarene University (NNU), include information that will facilitate your journey from high school to medical school. Admission to medical school involves three principle components: academic preparation as measured by college GPA and MCAT exam, character as measured by references, and personal representation as measured by personal statement and interviews. Each of these is important and enters the process separately.

High School Background – The high school transcript itself is not used in the selection process for medical school, but the skills and study habits developed in high school significantly influence your success in your college program. A four-year high school program or its equivalent must be completed. High school course work should include laboratory courses in biology and chemistry. Course work in physics is also advisable. Mathematics through pre-calculus math is strongly recommended. Take calculus if it is available and take advantage of Advance Placement courses. If possible, you should take advantage of classes or voluntary employment which brings you in contact with the medical profession.

For the new freshman, these pages will serve to outline the path ahead and, therefore, much of the information will be without immediate relevance. For the junior level student this information may appear too meager. However, as a junior you need to spend more time with your pre-medical advisor as you are completing all the forms and applications.

I THE UNDERGRADUATE MAJOR AND ACADEMIC ADVISING

- A. Choosing a Major – Sections IV and VI describe the curricular requirements for taking the MCAT examination and for entrance to medical school. An undergraduate major must be completed. From the point of view of the medical school, any major is acceptable. However, most students major in a science area because most of the requirements for medical school are in that area.
- B. The Major as an Alternative Career – As a pre-medical student, you should realistically face the possibility of not gaining admittance to medical school. What will you do if you are not accepted? Another allied health career? Graduate school? Thinking this way is not meant to discourage you, but to remind you of the realities of the medical school application process. Almost 40,000 students will apply to medical school, but only about 18,000 are accepted. Choose a major in an area that you really enjoy. Additionally, the average age of acceptance is in the late twenties. Many people follow another career before deciding to go to medical school.
- C. Academic Advising – When you enter NNU you may choose one of four pre-medical advisors: Dr. Chris Kapicka in biology and pre-medical advisor, Dr. Tom Mangum in biology, Dr. Jennifer Chase in chemistry, or Dr. Dan Nogales in chemistry. Your selected advisor will help you with both your departmental degree requirements and your pre-medical curriculum. They will be available to discuss any academic problems you have and will discuss with you the career possibilities of your major. Usually, your academic advisor will write one of your five letters of recommendation for medical school. Ideally, you and your selected advisor will meet often over a period of three or four years. Pre-medical students not majoring in a science area should consult with Dr. Chris Kapicka for pre-medical advising.

Dr. Chris Kapicka is responsible for the practice MCAT exam, AMCAS application to medical school and the observer program at Mercy Medical Center.

The pre-medical committee will review the progress of each pre-medical student at the end of each year. Also, one of the advisors of the pre-medical committee will schedule a review with you concerning your progress made each year.

- D. Undergraduate Curriculum at Northwest Nazarene University – Following is a list of subjects required by ten or more United States Medical Schools for the 2001-2002 entering class:

| <u>Required Subject</u> | <u>No. of Schools (n=119)</u> |
|--------------------------------|--------------------------------------|
| Physics | 117 |
| Biology or Zoology | 117 |
| Organic Chemistry | 116 |
| Inorganic (General) Chemistry | 115 |
| Biochemistry | 10 |
| English | 77 |
| Calculus | 23 |
| College Mathematics | 17 |
| Behavioral Sciences | 13 |
| Humanities | 12 |
| Social Sciences | 13 |

The courses in physics, chemistry and biology should be rigorous and acceptable for students majoring in those areas. The courses should include adequate laboratory experience. Candidates for medical school must study in these areas in order to (1) confirm their interest in and capacity for proceeding further in these fields, (2) enable medical schools to estimate their achievement and potential in these areas, and (3) meet the requirements of state laws governing physician licensure. The pre-health committee recommends that the requirements listed above can be met with the following classes at NNU:

- 1) General, Inorganic and Physical Chemistry (CM 221, 222) with laboratories; Organic Chemistry (CM 371, 372) with laboratories; and Biochemistry (CM 341, 342,) with laboratories (CM 345, 346).
- 2) Two semesters of Biology (BI 221, 222) with laboratories. Genetics (BI 372) with laboratory, and Cell Biology (BI 346).
- 3) College-level mathematics through one semester of calculus is considered to be the minimum requirement (MA 151 or 251). This will satisfy the entrance requirements for most medical schools. Since a full year of calculus is required at some medical schools, the mathematics sequence should be discussed with your advisor.
- 4) College-level physics is required by the vast majority of medical schools. The minimum requirement is College Physics with laboratory (PH 111, 112). A few medical schools require calculus-based physics (PH 211, 212).
- 5) Psychology (PY 155). Many medical schools require two classes in psychology. Since psychology counts toward your social science requirements for graduation at NNU, this is not an extra requirement.
- 6) NNU English requirement and Humanities graduation requirements.

Transfer students might have completed courses with different numbers and titles that would still be adequate. Transfer students should take note: Many medical schools do not look favorably on more than one year's enrollment at a community college. Post baccalaureate students and students who decide late in their undergraduate years that they wish to apply to medical school might satisfy medical school admission requirements without exactly following the NNU recommended program.

Suggested Course of Study for Biology/Chemistry Degree

The following suggested course study represents the model four-year program taken by most NNU pre-med students. The model suggests one sample arrangement; it does not dictate your choices.

Freshman Year

First Semester

| | |
|----------------------------------|------------|
| General Biology (Zoology) BI 221 | 5 |
| General Chemistry CM 221 | 5 |
| Wellness KI 100 | 1 |
| Freshman Seminar | 1 |
| Eng Comp/Speech* or Bib Stud | <u>3-4</u> |
| | 15-16 |

Second Semester

| | |
|---------------------------------|----------|
| General Biology (Botany) BI 222 | 5 |
| General Chemistry CM 222 | 5 |
| General Ed requirement | 3-4 |
| Eng Comp/Speech* or Bib Stud | 3-4 |
| KI Activity | <u>1</u> |
| | 17-19 |

*Speech credit can come from a campus proficiency exam if you had high school speech (9-12).

Must take Compass Exam during freshman year and pass in order to take Survey of Calculus sophomore year.

Sophomore Year

First Semester

| | |
|--------------------------|------------|
| Res/Crit Writing EN 202 | 3 |
| Organic Chemistry CM 371 | 4 |
| Speech or Bib Lit | 3-4 |
| Bio/Chem Elective | 3-5 |
| General Ed requirement | <u>2-3</u> |
| | 15-19 |

Second Semester

| | |
|------------------------------------|----------|
| Christian Theology TH 211 | 4 |
| Organic Chemistry CM 372 | 4 |
| Genetics BI 372 | 5 |
| Survey of Calculus MA 151 (or 251) | 3 |
| KI Activity | <u>1</u> |
| | 17 |

Junior Year

First Semester

| | |
|--------------------------------|------------|
| Physics PH 111 | 5 |
| Biochemistry CM 341, 345 | 5 |
| Bio/Chem Elective | 3-5 |
| General Education Requirements | <u>2-4</u> |
| | 15-19 |

Second Semester

| | |
|--------------------------|------------|
| Physics PH 112 | 5 |
| Biochemistry CM 342, 346 | 5 |
| Cell Biology BI 346 | 4 |
| General Education Course | <u>2-3</u> |
| | 16-17 |

Senior Year

First Semester

| | |
|--------------------------------|----------|
| Bio/Chem Elective | 3-5 |
| Bio/Chem Elective | 3-5 |
| General Education Requirements | 7-9 |
| Junior/Senior Project | <u>1</u> |
| | 14-19 |

Second Semester

| | |
|----------------------------|----------|
| Bio/Chem Elective | 3-5 |
| Gen Education Requirements | 11-13 |
| Senior Seminar | <u>1</u> |
| | 15-19 |

Comments:

- 1) Students with a weaker mathematics background should take pre-calculus math and consider taking only biology in the freshman year, but this may set back the MCAT and application process by one year.
- 2) Some medical schools require two psychology courses. To satisfy these schools, Intro to Psychology (PY 155) is recommended, followed by an upper division course in psychology.
- 3) Several of the required courses are sequenced only to be started Fall Semester. If you miss Fall Semester, you have virtually lost the year.
- 4) The medical school application process begins second semester of the junior year with the MCAT and continues through most of the senior year with applications and interviews.
- 5) Be sure to check Medical School Admissions Requirements USA and Canada in the Health and Science office to make sure you have met the requirements of all medical schools where you plan to apply.

II THE APPLICATION PROCESS

- A. AMCAS Schools – Nearly all medical schools in the United States subscribe to The American Medical College Application Service (AMCAS). AMCAS is a non-profit service administered by the Association of American Medical Colleges. Students make one application to AMCAS, whose staff then processes the materials of application and prepares an application to each medical school designated by the student on the application forms. The cost of this service is per application – the more schools the higher the charge from AMCAS. Applicants can complete, certify, and submit their AMCAS application via the AAMC web site. They no longer offer paper or diskette versions of the application. The site is at www.aamc.org. On the AAMC site there is a link to AMCAS application. The results of your MCAT score are sent directly to AMCAS and become part of your application.



AMCAS (The American Medical College Application Service)
Association of American Medical Colleges
2450 N Street, N.W.
Washington, D.C. 20037
(202) 828-1125
Web site: www.aamc.org

APPLICATION SCHEDULE

- 1) Register AMCAS forms between March 15 and July 15.
- 2) Complete the forms as carefully as possible. The AMCAS application involves making a personal statement that is critical for acceptance to medical school. Please consult your advisor when writing your personal statement. Dr. Chris Kapicka will answer your questions. She has a videotape that gives instruction on the process. Submit the forms and appropriate service fees directly to AMCAS. At this time you should request official transcripts from all colleges that you attended to be sent to AMCAS.
- 3) After all your materials have arrived at AMCAS, you will receive an "Acknowledgement of Receipt" of materials. After your application to the medical schools you requested have been prepared and sent, AMCAS will send you a "Transmitted Notification." After the medical schools receive the materials they may mail you an official application form to their medical school

- (secondary application). These applications should be completed and sent back to the medical school during September and October.
- 4) After your application has been sent, request Dr. Chris Kapicka to submit your evaluation letters collected at the end of your junior year (See Section IV-B).
 - 5) Sometime between November and February you will be invited to the medical school for an interview. Each interview will usually involve the expense of a plane trip and a motel room. At most medical schools you will be interviewed twice, each interview with a different person. The University of Washington Medical School has a group interview with three interviewers. Before the interview you will have the experience of mock interviews at NNU to prepare you for this experience. Typical questions asked at interviews (see pages 14 & 15) and things you could do at the interview will be discussed during your junior year. Some students are accepted into medical school within a week of the interview but the process can extend until May or June. Schools establish alternate or "waiting lists" from which they draw students until May or June.
- B. Non-AMCAS Schools – One hundred and fifteen medical schools participate in AMCAS but a few schools primarily in the Eastern United States are not members of AMCAS. You will have to write directly to these schools requesting application materials. See the Medical School Admission Requirement book for a list of Non-AMCAS Schools. One of the pre-medical advisors can help with questions you have on these application forms.

III FACTORS AFFECTING ADMISSION

- A. Applicant Trends to Medical School – After an enrollment plateau during the 1980s, applicants to medical school have increased to about 40,000 with 18,000 positions. It is becoming increasingly important for an applicant to have some distinguishing characteristics in addition to a high cumulative GPA.
- B. Residency – The likelihood of acceptance is greatest at the medical school in the state where you are a legal resident. This depends on the state. Private medical schools (i.e., Harvard) do not have residency requirements. Private medical schools may be the best chance for California residents.
- C. Grades – Applicants with a GPA of 3.5 and above have a higher probability of being accepted into medical school. Since 1987 the national mean GPA of the accepted candidates to medical school has been about 3.55. By themselves, however, good grades guarantee nothing. They do indicate a solid performance in the past and can predict a high probability of repeated success in the first two years of the medical school curriculum.
- D. MCAT Scores – The MCAT examination is divided into four areas: Biological Sciences, Physical Sciences, Verbal Reasoning, and two writing samples. Biological Sciences, Physical Sciences, and Verbal Reasoning are each scored on a 1-15 scale. The national mean score of accepted applicants has been 9s and 10s, depending on the medical school. The higher the MCAT score, the higher the probability of acceptance.
- E. Medical Observer Program – Grades and good MCAT scores prove scientific competence; medically allied experience can demonstrate both your commitment to and your understanding of health careers. The Medical Observer Program at Mercy Medical Center is designed to give NNU pre-medical students first-hand experience in the hospital emergency room, viewing surgery, and working with doctors in their offices. Students are also given the opportunity to visit Terry Reilly Health Center near campus, the largest federally funded health care facility in Idaho.

- F. Minority Students – All U.S. medical schools are seeking minority students as applicants. There are special summer programs and different admission criteria for minority students.
- G. Subjective Data – Obviously no statistical data can confirm the influence of letters of evaluation, of medically allied work experiences, or impressions made at interviews. When asked about "research" and "medical experience," medical school admissions personnel say you can get in without research but **not** without medical experience. However, research does add positively to your overall portfolio.

IV NON-CURRICULAR REQUIREMENTS FOR MEDICAL SCHOOL ADMISSION

- A. The Medical College Admission Test (MCAT) – The MCAT is required of all students as part of their application to medical school. The exam is administered each year in April and August. Applications can be obtained from the head pre-medical advisor sometime during February and they must be sent to the national office about one month before the exam date. **No student can take the exam without advance registration.**

The April MCAT is preferred as the August scores are not available to the student or medical school admission committee until mid-November. Many schools begin the admission process before mid-November, leaving the student at a disadvantage to the early applicants. **Some medical schools have an early decision program with acceptance to medical schools to be announced by October 1.**

MCAT (Medical College Admission Test)
 MCAT Program Office
 P O Box 4056
 Iowa City, Iowa 53343
 (319) 337-1357
 Web site: www.aamc.org/students/mcat/start.htm

- B. Letters of Evaluation
- 1) Number of evaluators: At the end of the junior year, you should select five people to write an evaluation on your behalf for medical school. After you have asked five evaluators if they would be willing to recommend you, obtain recommendation forms from the Health and Science office. These evaluations are collected, compiled and sent to the medical school by Dr. Chris Kapicka. They become a very significant part of the admission process. The student should be familiar with potential evaluators. The evaluators should be able to provide clear, confidential judgments of you both as a student and as a human being. You must find evaluators who can provide information that transcripts and test scores cannot, such as an estimation of your character, motivation, originality, imagination, and maturity. These help answer the question of why you should be chosen for medical school over someone else.
 - 2) Type of evaluators: Medical schools want information that can confirm that you will be a good medical student and that you have the personality traits to be a competent physician. Of the five evaluators, probably three should be from science (biology, chemistry, physics or mathematics) with a minimum of two areas represented. Your application to medical school is damaged if sent with fewer than two evaluations from science. Medical schools want to know that you are a well-rounded person, so a mix of evaluators from different areas is best. A good mix would be three from science, one from another area on campus, such as literature or psychology, and one from a person with whom you have done community service. One of the science people would ideally be your research director. For this reason, it is important for pre-medical students to do much of their research during their junior year. One of the science letters could

be from your major advisor. The student makes the final decision as to who writes the five letters of evaluation.

Off-campus letters are particularly valuable if they reflect your experience in medically allied work such as shadowing a doctor or being an orderly in a hospital or nursing home. Many of our students do volunteer work at the Hope House, Terry Reilly Health Center, or area retirement centers. Volunteer work should involve patient contact and you should learn something from this experience. It's what you get out of the volunteer experience that is important to the medical school. Letters on your performance in these environments can show that your interest in medicine is not superficial and inexperienced. A letter from your family physician doesn't usually carry much weight. The primary areas that medical schools ask evaluators to comment on are: maturity, motivation for medicine, emotional stability, communication skills, interpersonal relations, and intellect.

The evaluation process usually begins in May after the MCAT examination. Evaluators can spend more time during June to write a meaningful letter, which is then sent to Dr. Chris Kapicka. Your evaluations are then compiled and prepared to send to medical schools as you request them. Evaluators are given a letter of instructions about how to write a meaningful evaluation.

- C. Transcripts and Grades – All medical schools require official transcripts from every college you have attended. Generally, only applicants with a GPA well above 3.0 have a good chance of admission to medical school. For the last several years the national mean cumulative GPA for accepted applicants has been about 3.55 in all college work.

V SOME IMPORTANT CONSIDERATIONS AND SUGGESTIONS

- A. MCAT Content – After many years of study, a newly formatted MCAT exam was introduced in the spring of 1991. The new MCAT exam, which you will take, includes four subtests:

| | |
|-----------------------------------|-------------|
| Verbal Reasoning | 85 minutes |
| Physical Sciences | 100 minutes |
| (Physics & General Chemistry) | |
| Writing Sample | 60 minutes |
| Biological Sciences | 100 minutes |
| (Biology, Organic & Biochemistry) | |

The best preparation for the science examinations is the biology/chemistry degree program. Preparations for the verbal reasoning section can best be secured through study in the humanities and social science via general requirements at NNU. Improving writing ability requires writing experience spread over as long a time as possible, including freshman composition courses and any course where students write term papers and essay exams. As you go through the first three years of college, you should remember that two of the four examinations are in areas outside the traditional physical and biological sciences.

- B. MCAT Preparation – The Association of American Medical Colleges has published a manual for you to use during your review for the MCAT. Copies of the manual and sample MCAT exams can be obtained at cost in the Health and Science office. You may wish to purchase the manual early in your pre-medical career. The manual explains in detail the subject matter content of all the sciences to be covered by the MCAT exam. It is set up like a table of contents with major divisions and subdivisions. You must be the

final judge of your own preparation for the examination. Discuss the exam with your advisor.

The Physical and Life Sciences portion of the MCAT examination measures your preparation in the basic sciences. It measures your ability to (1) gather, analyze and evaluate information, and (2) use the information in problem solving. This information is presented in mixed ways: (a) narrative readings from social, behavioral, and the basic sciences of biology, chemistry and physics; (b) tabular summarized and raw data; and (c) formal and informal. The quantitative materials depend considerably less on the student's ability to compute than on ability to read and understand all manner of data. No calculators are permitted in the testing area.

Some students have found professional KAPLAN review courses for pre-med helpful for MCAT. You may find this information at www.kaptest.com web site.

- C. Selecting Medical Schools – Students should begin as freshmen to become knowledgeable about different medical schools. Most students apply to a minimum of five medical schools. In 1993 the average student in the United States applied to 13 medical schools! This probably represents a waste of time and money. If you match schools with your qualifications, six to eight applications should suffice. Medical schools are different in their programs, specialty opportunities, and timetables for beginning clinical work. The AAMC Curriculum Directory is on file in the Health and Science office. A common question at interviews is "Why do you want to come to this particular school?" You must have an informed answer.
- D. Pre-Medical Scholarships at NNU – Sophomore, junior, and senior pre-medical students are eligible for the following scholarships specifically granted to pre-medical students:

Howard Johnson Memorial Scholarship
Howard Hamlin Memorial Scholarship
Dr. Bob & Lois Mangum Health Science Scholarship

In addition to these scholarships, pre-medical students can apply for a Teaching Assistantship in the Health and Science office.

VI. CURRICULAR REQUIREMENTS FOR MEDICAL SCHOOL ADMISSION

- A. Undergraduate Requirements for Medical School – There are a few medical programs in the United States that admit students after just three years of college. However, the majority of all first-year medical students have completed an undergraduate degree.

Specific course requirements for entrance into medical school vary from medical school to medical school. However, most medical schools have a minimum requirement of one year of general chemistry, one year of biology, one year of physics, and one year of organic chemistry, all with laboratories. Exact admission requirements are detailed in the yearly revised Medical School Admission Requirements: USA and Canada that may be viewed in the Health and Science office.

Normally, state-supported medical schools provide the majority of seats to residents of that state. Students from any state can apply to any of the many private medical schools in the United States, i.e., Harvard, St. Louis, Stanford, Loma Linda.

For Idaho, Montana, Wyoming, and Alaska residents, the best chance for acceptance into a public medical school is probably via the WWAMI program. The University of Washington Medical School guarantees eighteen positions from Idaho, twenty positions from Montana, ten positions from Wyoming, and ten positions from Alaska each year in its medical school for each of the

states of Alaska, Montana, Wyoming, and Idaho. For most Washington residents the medical school of choice and best chance of admission to a state/public school would also be the University of Washington in Seattle, Washington. Additional information about WWAMI can be viewed at www.washington.edu/medical/som

1. **University of Washington**
 Admissions Office
 Health Sciences Center A-300, Box 356340
 Seattle, Washington 98195-6340
 (206) 543-7212
 E-mail: askuwsom@u.washington.edu
 Web site: <http://www.washington.edu/medical/som/>

Requirements for Entrance: The new MCAT, taken in the spring of 1999 or thereafter, is required. This exam must be taken no later than the autumn of the year before possible matriculation. Under exceptional circumstances, the GRE may be considered during the admissions process; however, if accepted, the applicant will be required to take the MCAT prior to matriculation. The following course requirements must be completed before matriculation:

| | Sem. Hrs. |
|---|-----------|
| Biology | 8 |
| Chemistry | 12 |
| (May be satisfied by taking any combination of inorganic, organic, biochemistry, or molecular biology courses.) | |
| Physics..... | 4 |
| Other Sciences..... | 8 |
| (May be satisfied by taking other courses in any of the above categories.) | |

Under exceptional circumstances, certain course requirements may be waived for individuals with unusual achievements and academic promise.

A minimum of three years of college is required; however 99 to 100 percent of entrants in recent years have fulfilled requirements for a bachelor's degree. No major is preferred, but a broad educational background is encouraged.

2. **University of Utah**
 Director, Admissions
 50 North Medical Drive Room 1C029
 Salt Lake City, UT 84132
 (801) 581-7498; FAX (801) 585-3300
 E-mail: deans.admissions@hsc.utah.com
 Web site: <http://www.med.utah.edu/som>



Idaho residents also have guaranteed positions at the University of Utah under the WICHE program. The University of Utah, School of Medicine, represents the best chance for admission for **Utah** residents also. Students from **Montana** and **Wyoming** participate in WICHE also. See www.wiche.edu for more information.

Requirements for Entrance: The MCAT is required and must be taken within four years of application. The Admissions Committee is eager to admit students with a broad perspective of life. The school believes that the true physician not only is skilled in medicine and the allied sciences but also is a person of culture and broad intelligence.

The applicant must have subject matter competence in the following courses:

| | Years |
|---|-------|
| Chemistry (with lab)..... | 2 |
| (General chemistry, including quantitative & qualitative analysis & organic series, both with a lab.) | |
| General physics (with lab)..... | 1 |
| English composition and/or basic communication | 1 |

Two college-level courses in biology, including cell biology or biochemistry, and college-level courses in humanities and the social sciences are required.

With the exception of advanced placement credit for general chemistry at a level of 4 or 5, CLEP, advanced placement, or home study credit will not be accepted for completion of required course work. These courses must be taken at an accredited college or university in the United States or Canada.

Completion of four years of college work and a bachelor's degree are required before matriculation.

- 3. University of Colorado**
School of Medicine
Medical School Admissions
4200 East 9th Avenue, C-297
Denver, Colorado 80262
(303) 315-7361; FAX 315-8494
E-mail: somadmin@uchsc.edu
Web site: <http://www.uchsc.edu>

Idaho residents may also apply to the University of Colorado, School of Medicine, under the WICHE program. However, the cost is \$58,000 per year for non-residents. **Colorado** residents have their best chance for acceptance at the University of Colorado, School of Medicine.

Requirements for Entrance: The MCAT and a baccalaureate degree or at least 120 semester hours of college credit with a major leading to a degree are required. The MCAT must be taken before the November 7 application deadline. The following courses are required:

| | Sem. Hrs. |
|--|-----------|
| General biology or zoology (with lab)..... | 8 |
| General chemistry (with lab) | 8 |
| Organic chemistry (with lab)..... | 8 |
| General physics (with lab)..... | 8 |
| College mathematics | 6 |
| (Should include at least college level algebra & trigonometry or the equivalent by means of advanced placement.) | |
| English literature, composition, or equivalent | 9 |

A good base in molecular biology and genetics will be helpful, as well as biochemistry.

In order to receive credit for any advanced placement, the subject matter credited must be listed on the official college transcript.

- 4. Oregon Health Sciences University, School of Medicine**
Office of Education & Student Affairs, L102
3181 S.W. Sam Jackson Park Road
Portland, Oregon 97201-3098
(503) 494-2998; FAX 494-3400
Web site: <http://www.ohsu.edu/som-Dean/admit.html>

For most **Oregon** residents, the Oregon Health Sciences University of Medicine in Portland represents the first choice and best chance for admission.

Requirements for Entrance: To receive serious consideration by the Admissions Committee, all applicants must meet the following requirements:

A Bachelor of Arts or Bachelor of Science degree, or its equivalent, from an accredited college or university is required prior to matriculation to medical school. No particular major is preferred, but a broad educational background is encouraged.

The following are prescribed as the minimum acceptable college level courses for admission. (Note: One academic year is equivalent to two semesters or three quarters.)

Chemistry – two academic years of chemistry (with lab) to include general chemistry (with lab) and organic chemistry (with lab). An introductory course in biochemistry is advantageous. Courses in advanced chemistry are recommended for applicants considering special medical programs with emphasis in the basic sciences (e.g. M.D.- Ph.D. Combined Degree Program).

Biology – one academic year of general biology. A course in basic genetics is advantageous. Advanced courses in molecular biology are recommended for applicants considering the M.D.- Ph.D. Program.

Physics – one academic year of general physics (with lab).

College Mathematics – one college level math course (semester/quarter) such as algebra, calculus, etc.

Humanities, Social Sciences and English – one academic year of humanities, one academic year of social sciences, and one academic year of English to include at least one course in composition.

MCAT test scores from 1998 or later will be accepted.

5. **Loma Linda University, School of Medicine**
Associate Dean for Admissions
School of Medicine
Loma Linda, California 92350
(909) 558-4467; FAX 558-0359
E-mail: ledwards@som.llu.edu
Web site: <http://www.llu.edu>

Loma Linda's purpose is the formation of Christian physicians. The school endeavors to reinforce interest in the practical application of Christian principles through service to humanity. NNU students have been quite successful in being admitted to Loma Linda University.

Requirements for Entrance: The MCAT and a minimum of three years of college (90 semester hours) are required. Preference is given to applicants who have completed a baccalaureate degree. The following courses are required.

| | Sem. Hrs. |
|--|-----------|
| General biology or zoology (with lab)..... | 8 |
| General or inorganic chemistry (with lab)..... | 8 |
| Organic chemistry (with lab)..... | 8 |
| English..... | |
| (Equivalent to satisfy baccalaureate degree requirement) | |

Biochemistry is strongly recommended. Computer skills are considered essential and a course in basic statistics is recommended.

6. **Other Schools NNU Students Frequently Apply to:**

Refer to: Medical School Admission Requirements for the following schools' specific requirements (available in the Health and Science office).

St. Louis University School of Medicine

Admissions Committee
School of Medicine
1402 South Grand Boulevard
St. Louis, Missouri 63104
(314) 577-8205; FAX 577-8214
E-mail: medadmis@slu.edu
Web site: <http://www.slu.edu/colleges/med>

Ohio State University, College of Medicine and Public Health

Admissions Committee
209-A Meiling Hall
370 West Ninth Avenue
Columbus, Ohio 43210-1238
(614) 292-7137; FAX 247-7959
E-mail: admiss-med@osu.edu
Web site: <http://www.med.ohio-state.edu>

Creighton University, School of Medicine

Office of Admissions
2500 California Plaza
Omaha, Nebraska 68178
(402) 280-2799; FAX 280-1241
E-mail: medschadm@creighton.edu
Web site: <http://medicine.creighton.edu>

This material is taken from the Medical School Admission Requirements: USA and Canada, The Journal of Medical Education, The Oregon Health Sciences University School of Medicine Bulletin and The University of Washington WWAMI Program. Information obtained by the pre-medical advisors during visits to medical schools and national and regional meetings are also included. Experiences of NNU pre-medical students have been used as a means to offer you pointers and advice.



EXPECTATION CALENDAR

Freshman Year

Meet with Pre-Health Professional Academic Committee
Identify yourself as Pre-Health Professional to Academic Committee (register on web site)
Choose an advisor from Academic Committee and meet with advisor
Attend announced Pre-Health Professional seminars/speakers
Must take Compass Exam before Survey of Calculus (sophomore year) or have a high enough ACT math score.

Sophomore Year

Meet with Pre-Health Professional Academic Committee
Meet with advisor
Attend announced Pre-Health Professional seminars/speakers
Begin to check out shadow and volunteer opportunities by end of sophomore year
Check out senior research project opportunities during sophomore year
Begin investigating potential health professional schools (see www.aamc.org for medical schools)
Take one practice MCAT exam
Attend post-interview session
Consider summer medical mission trip

Junior Year

Meet with Pre-Health Professional Committee
Meet with advisor
Sign up for MCAT (see www.aamc.org)
Attend announced Pre-Health Professional seminars/speakers
Begin shadow and volunteer opportunities (if you haven't already)
Begin junior/senior project
Narrow school list and begin application process (FAP due 3/2)
Take MCAT practice exams (February-March)
Take MCAT exams (April, August)
Attend post-interview session (March-April)
Contribute article for Pre-health Newsletters
Before leaving for summer break, give recommendation forms to faculty members/mentors
Summer – Work on junior/senior project
Work on applications/recommendation packet (get packet from Health and Science office)

Senior Year

Meet with Pre-Health Professional Committee
Attend announced Pre-Health Professional seminars/speakers

Can you answer these?

Below is a list of questions commonly asked by interviewers, compiled by students at the University of Washington and others. How would you respond to these questions? Are you keeping in touch with current events? Remember, it is never too early to start preparing for the medical school interview!

- ❖ What specific factors in your life lead you to pursue a career in medicine?
- ❖ Have you ever considered a career in another field?
- ❖ Briefly describe your contacts with the medical field.
- ❖ What assets do you have that you feel will make you a good physician?
- ❖ If you had to choose a specialty now, what would it be and why?
- ❖ Are you interested in research? If so, in what area? Have you had any experiences in research settings? What were your responsibilities and what did you learn?
- ❖ How have you served your community during college?
- ❖ Describe the college activities in which you participate.
- ❖ Describe your most significant volunteer experience and how it affected you.
- ❖ If you are not accepted to medical school, what other career would you consider and why?
- ❖ What made you apply to our medical school? What other schools are you considering?
- ❖ Medicine is a very demanding career. How do you plan to juggle your career with family? Do you plan on having children? What is the most important lesson you feel you could teach them?
- ❖ What are qualities you look for in a friend?
- ❖ What is the most sacred thing you know?
- ❖ Are you registered to vote? Who is your governor? Who is your representative to Congress?
- ❖ What are your views on reproductive technology?
- ❖ If there was one thing you could change about yourself, what would it be and why?
- ❖ Do you practice a religion? If so, which one? Do you have any strong convictions that may be challenged by modern medicine?
- ❖ What do you do to relax? What leisure activity do you enjoy the most?
- ❖ What is your opinion of our surgeon general?
- ❖ What is your stand on abortion and why?
- ❖ What is your stand on cloning and why?
- ❖ If you could change one event in history, what would it be and why?
- ❖ Do you think drugs should be legalized? How do you think we could win the "War on Drugs?" What role should the medical profession take?
- ❖ How do you handle pressure? What has been your most stressful experience in college?
- ❖ What do you feel are the greatest problems challenging today's physicians?
- ❖ How will medicine change over the next decade?

- ❖ What is your opinion of socialized medicine? What is a HMO? What is Managed Health Care?
- ❖ How do you define "adequate health care?" Do you feel everyone should have access to expensive procedures? If so, who should pay?
- ❖ What is the last book you read?
- ❖ What is Medicare? Medicaid? Do you feel these programs are adequately meeting the needs of those who require service?
- ❖ What are your thoughts on mandatory AIDS testing? How do you feel about treating an AIDS patient?
- ❖ Who has had the greatest influence on your development and why?
- ❖ Do you feel that our society as a whole neglects its elderly? If so, how would you suggest we change the attitude toward our aging population?

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