Pre-Professional Track

A pre-professional program is a statement of intent on the student’s part, not an academic major. No university offers a “major” in pre-medicine.

The majority of UWL pre-medical students are residents of Wisconsin. Accordingly, this curriculum guide represents UWL courses that will satisfy the minimum requirements of the Wisconsin medical schools. If you intend to apply to an out-of-state medical school, you are cautioned to carefully check the requirements of that school.

Study the UWL catalog for details of (1) General Education, (2) College Core requirements, and (3) graduation requirements. The pre-medicine adviser and college counselors will provide as much assistance as possible to assure a smooth and successful program, but the ultimate responsibility for completing university graduation requirements and medical school admission requirements rests with the student.

In planning your curriculum, it is very important that all pre-medicine requirements and as many pertinent electives as possible are completed by the end of the junior year. Along with academic record, the Medical College Admission Test (MCAT) scores are the most important factors determining admission to medical school. The MCAT is ideally taken between April and June of the junior year. **Plan your curriculum carefully** in order that you may achieve your MCAT potential.

**Recommended UWL Courses That Fulfill Medical School Admission Requirements**

**COURSE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>105</td>
<td>General Biology</td>
</tr>
<tr>
<td></td>
<td>312 &amp; 313</td>
<td>Anatomy &amp; Physiology I &amp; II</td>
</tr>
<tr>
<td></td>
<td>306 or 315</td>
<td>Genetics or Cell Biology</td>
</tr>
<tr>
<td>Chemistry</td>
<td>103</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td></td>
<td>104</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td></td>
<td>303</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td></td>
<td>304</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td></td>
<td>305</td>
<td>Organic Chemistry Lab</td>
</tr>
<tr>
<td></td>
<td>325</td>
<td>Survey Biochemistry</td>
</tr>
<tr>
<td>Mathematics</td>
<td>145</td>
<td>Statistics</td>
</tr>
<tr>
<td>Physics</td>
<td>103</td>
<td>Fundamental Physics I</td>
</tr>
<tr>
<td></td>
<td>104</td>
<td>Fundamental Physics II</td>
</tr>
<tr>
<td></td>
<td>203</td>
<td>General Physics I</td>
</tr>
<tr>
<td></td>
<td>204</td>
<td>General Physics II</td>
</tr>
<tr>
<td>(calculus is a prerequisite)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>110</td>
<td>College Writing I</td>
</tr>
<tr>
<td></td>
<td>xxx</td>
<td>Select one additional English course</td>
</tr>
<tr>
<td>Psychology</td>
<td>100</td>
<td>General Psychology</td>
</tr>
<tr>
<td>Sociology</td>
<td>110</td>
<td>Introduction to Sociology</td>
</tr>
</tbody>
</table>

**NOTE:** Several of the above admission requirements also satisfy UWL General Education requirements.
How Medical Education Works

BEFORE MEDICAL SCHOOL

Admission to Medical School: Typically, medical schools require a college bachelor’s degree. The degree may be in any discipline, but the student must take basic courses in biology, chemistry, physics and mathematics. College course work should also include courses in language, written and spoken communication, literature, the arts, history, social sciences, etc. Many medical schools also require at least one psychology course. Most medical schools are looking for people who have not only ability in the sciences, but also have well-rounded interests, a broad education, knowledge of and experiences in the medical field as well as campus and community involvement.

The ability to handle medical school studies is determined largely by grade point average and the Medical College Admission Test (MCAT), which is given nationwide several times per year. Most applicants to medical school take this exam in the spring of the junior year in college. The MCAT tests for basic knowledge in the physical and biological sciences, math, and for skills in problem solving and reading comprehension along with verbal reasoning in the humanities and social sciences in addition to writing samples.

Once academic ability has been demonstrated, most medical schools attempt to judge the applicant’s motivation and personal character. At the University of Wisconsin, The Admissions Committee members rely heavily on the essays applicants write, on letters of recommendation, and, ultimately a personal interview to assess these factors and measure potential for development as a physician.

IN MEDICAL SCHOOL

The Basic Science Years (Years One and Two): The traditional course work leading to the M.D. degree starts with two years of basic sciences: biochemistry, anatomy, physiology, microbiology, pathology, and pharmacology. The student learns about normal and abnormal body functions as a prerequisite to clinical studies in hospital settings. Most schools also introduce some clinical medicine in these years. For instance, the student learns how to take a patient’s health history and do a physical exam.

The Clinical or Hospital Years (Years Three and Four): Most schools require prescribed experiences in the major clinical specialties: internal medicine, surgery, pediatrics, psychiatry, and gynecology and obstetrics. Beyond this required training, the student has the opportunity to take electives in other areas such as radiology or neurology. Exposure to the many fields of medicine helps the student determine in which area he or she may wish to specialize.

AFTER MEDICAL SCHOOL

Residency Training: The knowledge and skills necessary to practice medicine today require further training. Whether the professional goal is family practice or nuclear medicine, the newly graduated M.D. takes additional hospital training as a resident physician. The usual residency is three to four years incorporating the year formerly known as an internship. Some subspecialties, e.g. neurosurgery, require up to seven years.

Fellowship Training: Post-residency training may be taken in a select area of a specialty. For example, the physician who has taken residency training in general problems of eye disease may choose to become an expert in problems of the retina of the eye.

Years in Practice: With new advancements, medicine is ever-changing. Because medical schools must keep abreast of new methods and research discoveries, they offer courses in continuing education to practicing physicians and other health professionals.