Advice for the First-Year Pre-Medical Student at St. Olaf College

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As an aspiring allopathic or osteopathic physician, you probably know that your four years here at St. Olaf will offer many opportunities for your growth and development into someone who is academically and emotionally ready for medical school and a career in medicine. However, it's easy to get caught up in the simple yet often daunting question: ***"What do I need to do to get into medical school?"***

You need:

- a strong overall academic performance (average GPA of successful applicants is 3.7)[1];
- a strong science/math academic performance (~3.6);
- upper division science course work beyond the basic prerequisites for the MCAT;
- a competitive MCAT score (~510) without glaring discrepancies between subsections;
- 200-400 hours of experience in a US medical setting (e.g., scribing, shadowing, EMT, CNA);
    - a significant portion of these hours should be working hands-on with patients (not childcare, "greeting", candy-striping, etc.)
    - a significant portion of these hours should be spent observing physicians as they work with patients
- ~100 hours of research/scholarship (e.g., laboratory research, interdisciplinary practicum, a major independent study paper, other significant artistic or scholarly work);
- significant hours of meaningful volunteer service over several recent years, in each of the following areas (they can overlap):
    - working with the underserved in a US setting
    - making a difference in the community in which you live (your hometown and/or the Northfield area)
    - participating in non-medically related volunteer opportunities
- to be a well-rounded, balanced individual with interests and talents (e.g., the arts, music, athletics) beyond getting accepted into medical school!

Can you get this all done in **JUST THREE YEARS**[2]??? You don't have to. Nationally, most students who are successfully admitted into medical school take 1-2 development years (sometimes referred to as 'gap' years) between college and medical school in order to finish growing into the best candidate they can be before applying to medical school. If you can achieve all of the above by late Spring of your Junior Year, terrific! Otherwise, you're in excellent company, as the average age of a first year medical student is 24.

As a first-year undergrad, the most immediate of the above points is taking the required courses that will keep you on track to take the MCAT (or DAT, for pre-dentistry students), so we will focus on that in this handout. As you adjust to college life, talk to your academic advisor, professors and us about your individual path to becoming a physician.

** IMPORTANT ** Bring this sheet of paper to your meeting with your academic advisor as you plan your courses. Only your academic advisor has the authority to approve your course schedule. We can't do that!

What courses are required for admission to medical school? Each medical school differs somewhat in their exact list of courses required for admission, but it's convenient that St. Olaf's general education curriculum provides you with most of the non-science prerequisites on these lists! HOWEVER, where all medical schools are the SAME is in their requirement of an MCAT score. So, the question actually becomes... *"What courses are required for successful completion of the MCAT?"*

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[1] Average GPA and MCAT scores are often predictive of acceptance to medical school. However, special consideration is given to students who are disabled, under-represented, socio-economically disadvantaged, or underrepresented, and to the challenges such students may have faced on the road to applying to medical school. Conversely, most medical schools do not accept international applicants and most public medical schools do not accept out-of-state candidates, no matter how high their MCAT or GPA numbers are.

[2] The application process to medical school is typically 6-12 months. Students who plan to matriculate into medical school 3 months after graduating from college will begin the application process during the Spring of their Junior Year.

Chemistry	*general*: CHEM 125 and 126*, or CHEM 121, 123, and 126, or CH/BI 125 and 126*
	organic: CHEM 247 (lab CHEM 253) and 248 (lab CHEM 254)
Biology	BIO 150 and 227 (or CH/BI 227), BIO 233 (genetics) and physiology (BIO 243 or BIO 247)
	CHEM 379 (biochemistry; lab is not necessary but recommended)
Physics	PHY 124 and 125
Psychology	PSYCH 125 and 241 (developmental psychology)
Sociology	any course on domestic social issues
Math	STAT 110, 212, 214 or 263; note that at least one semester of calculus (MATH 120 or equivalent, or higher) is a prerequisite for CHEM 126 and CH/BI 126

How will I fit these premedical courses in with my major[3] and GE requirements? Because many of the premedical courses overlap with general education requirements and/or major requirements (SED, IST, HBS, AQR), it's less difficult than you might think. However, it's a good idea to talk with your academic advisor about your premedical courses in the context of your prospective major(s) and any potential study abroad plans.

So, what should I register for during my first year? In Fall, most first year science (including premedical) students are taking a first year course (either a REL or a WRI or a "conversations" course), a language course, and a math course. We highly recommend that the fourth course be a chemistry course (either CHEM 121 or CHEM 125 or CH/BI 125 depending on your chemistry placement results). Please note that if you are in the Great Con sequence, you cannot take CHEM 121 (as it requires CHEM 123 in the Interim), or the CH/BI 125 course (as it requires CH/BI 126 in the Interim). Take BIO 150/227 in your second year, as a semester of chemistry is recommended prior to BIO 227. Plan your social science and statistics courses around the sequence-dependent natural science lab courses. Below are some sample schedules for planning the sequence of natural science lab courses that you will need to prepare for the MCAT. ***This is also a good starting point for pre-dentistry, pre-veterinary medicine, pre-physician assistant, etc.***

	FALL	INTERIM	SPRING
first year	CHEM 125, REL 121, language, MATH 120	any course	CHEM 126, WRIT 111, language, one other course
sophomore	CHEM 247/253, BIO 150, two other courses	any course	CHEM 248/254, BIO 227, two other courses
junior	PHY 124, CHEM 379, two other courses	any course	PHY 125,BIO 233, two other courses
senior	Bio 243 or 247, three other courses	any course	only 3 courses, leaving time for **MCAT**

	FALL	INTERIM	SPRING
first year	CHEM 121, WRIT 111, language, MATH 120	CHEM 123	CHEM 126, REL 121, language, one other course
sophomore	CHEM 247/253, BIO 150, two other courses	any course	CHEM 248/254, BIO 227, two other courses
junior	PHY 124, CHEM 379, BIO 243 or 247, one other course	any course	PHY 125, BIO 233, one other course, leaving time for the **MCAT**
senior	any courses	any course	any courses

	FALL/SUMMER TERM 1	INTERIM	SPRING/SUMMER TERM 2
first year	CH/BI 125, REL 121, language, math	CH/BI 126	CH/BI 227, GE 111, language, elective (could be BIO 150)
sophomore	CHEM 247/253, BIO 150 if not taken, two or three other courses	any course	CHEM 248/254, BIO 233, two other courses
summer*	PHYS 124		PHYS 125
junior or senior[4]	CHEM 379, BIO 243 or 247, two other courses	any course	only 3 courses, leaving time for **MCAT**

* Alternatively, CHEM 247/253 and/or CHEM 248/254 could be completed the summer before your sophomore year.

[3] You will **NOT** make yourself more competitive for medical school by double-majoring. You may pick any major that interests you, so long as you can complete the requirements at the top of the page. You do **NOT** need to major in a science.
[4] Junior year is a good time to study abroad; pre-meds can and *should* study abroad if they want to, but should plan ahead.