

Medicine (MD & DO)

WHAT DO PHYSICIANS DO?

Along with nurses, physicians are on the front line of medicine. As practitioners, they work in solo or group practices examining patients and obtaining medical histories; ordering, performing and interpreting diagnostic tests; and prescribing and administering treatment for patients suffering from injury or disease. They also counsel patients about illness, injuries, health conditions and preventive healthcare (diet/fitness, smoking cessation, etc.). In laboratories across the country, physician researchers look for the cause of illnesses and for new and better ways to treat all kinds of diseases and injuries. They run medical centers and teach future generations of physicians and other health care practitioners. Physicians choose a specialty during their training. The Accreditation Council for Graduate Medical Education accredits training programs in [133 specialties and subspecialties](#), and the American Board of Medical Specialties represents [24 board-certified specialties](#) (with many sub-specialties within each of these major specialties).

If you are interested in becoming a physician, you can choose from two paths—getting your doctor of medicine (M.D.) degree or getting a doctor of osteopathic medicine (D.O.) degree. While the end result is the same—a career as a physician—the training and education are different. (from [explorehealthcareers.org](#))

What is osteopathic medicine? Osteopathic medicine provides all of the benefits of modern medicine including prescription drugs, surgery, and the use of technology to diagnose disease and evaluate injury. It also offers the added benefit of hands-on diagnosis and treatment through a system of treatment known as [osteopathic manipulative medicine](#). Osteopathic medicine emphasizes helping each person achieve a high level of wellness by focusing on health promotion and disease prevention. Osteopathic physicians can choose any specialty, prescribe drugs, perform surgeries, and practice medicine anywhere in the United States. (from [AACOM](#))

WHAT ARE THE ACADEMIC PREREQUISITES?

In making decisions about admissions, MD and DO schools consider a range of factors *that may vary from one school to another*. All prerequisite courses need to be completed with a grade of C or higher. Average GPA of successful applicants from St. Olaf to medical school is 3.7, with an average science GPA of 3.62.

It is recommended, and often required, that you complete the following courses:*

Biology	BIO 150 and 227 (or CH/BI 227), BIO 233 (genetics) and physiology (BIO 243 or BIO 247)
Chemistry	1 year Gen Chem w. lab (CHEM 125 & 126 or CH/BI 125 & 227 or CHEM 121, 123, and 126 or CHEM 122 & 126) 1 year Organic Chem w. Lab (CHEM 247 & 248) 1 sem Biochem (CHEM 379 - lab is not necessary but recommended) (pre-req for MCAT)
Physics	1 year Gen Physics with lab (PHYS 124 & 125)
Math & Stats	Calculus (MATH 119 or 120) (pre-req for Gen Chem) Statistics - (STAT 110, 212, 214, or 263)
Psychology	PSYCH 125 and maybe 241 (developmental psychology)
Sociology	SOAN 121, 260, 264 or 267 (for MCAT)

Sample Course Timeline

The following timeline is an example of how you *might* wish to schedule your prerequisite courses. Timing of these courses may change due to major requirements, study abroad experiences, cohort coursework such as Great Con or Ch/Bi, timing of the MCAT/application, and admissions guidelines at Podiatry schools. In addition to these courses, each student will fit in any classes required by their major. All students are strongly encouraged to meet with Professor Crisp to plan pre-med courses. All students must also consult with their advisors regarding course selection.

Year 1: General Chemistry, MATH 119 or 120, PSYCH 125 or SOAN course, BIO 150 (or year 2)

Year 2: CHEM 247 & 248, BIO 150 (or year 1), BIO 227, Statistics, PSYCH 125 or SOAN course

Suggestions or edits? Email: crisp@stolaf.edu and hughes8@stolaf.edu

Year 3/4: CHEM 379, PHYS 124 & 125, BIO 243, BIO 233 and/or additional upper-division science courses

Sample Prerequisite Course Requirements for Admission to Medical School

- [University of Minnesota](#) (MD)
- [Creighton University](#) (MD)
- [Medical College of Wisconsin](#) (MD)
- [Loyola University Chicago](#) (MD)
- [Eastern Virginia Medical School](#) (MD)
- [Des Moines University](#) (DO)

**Please note, it is the applicant's responsibility to ensure they complete all prerequisite coursework in the time required for admission. Please consult each podiatry school's website for prerequisite requirements.*

WHAT STANDARDIZED TEST WILL I NEED TO TAKE?

[Medical College Admission Test® \(MCAT®\)](#)

WHAT CENTRALIZED APPLICATION WILL I USE?

[AAMCAS](#) (MD Programs)

[AACOMAS](#) (DO Programs)

WHAT ARE THE EXPERIENTIAL PREREQUISITES?*

- **Shadowing:** Paid or volunteer experience in which there is significant observation of a physician is required.
- **Volunteering:** It is highly recommended that you volunteer in your community, starting as early as your first year at St. Olaf. Although your volunteer role can be in healthcare or outside of healthcare, we recommend that you aim to volunteer in both capacities. Medical schools are looking for applicants with **sustained and meaningful** volunteer experiences. They don't want students who are simply checking the "volunteer box."
- **Internship(s):** It is recommended that you gain experience in the field through interning at a medical clinic, a department of health, a community clinic, etc.
- **Leadership:** It is strongly recommended that you serve in a leadership capacity (president of an organization, academic tutor, service on an advisory board, etc.). Leaders can enhance their communication and organizational skills, as well as learn how to interact with individuals from a wide variety of backgrounds.
- **Research:** It is highly recommended that you complete at least one 10-week summer research experience. You do not have to find a research opportunity that is related to medicine.
- **Post-baccalaureate Experience:** Many medical students have had employment experience between college and medical school, often holding positions within healthcare; the average age of admission is 24.

WHAT OTHER RESOURCES ARE AVAILABLE AT ST. OLAF?

[Study Abroad Alpha Epsilon Delta: Preprofessional Health Honor Society](#)

[Pre-health Professionals Club](#)

[Pre-health Moodle site](#)

[Pre-health Google calendar](#)

[Collaborative Undergraduate Research and Inquiry](#)

PROFESSIONAL ASSOCIATIONS

[Association of American Medical Colleges](#) (AAMC)

[American Medical Association](#) (AMA)

[American Association of Colleges of Osteopathic Medicine](#) (AACOM)

[American Osteopathic Association](#) (AOA)

WHO IS THE DESIGNATED ADVISING SPECIALIST?

Professor Kevin Crisp (Professor of Biology, Chair of the Health Professions Committee)

Office: Pre-Health Advising in Piper Center (TOH 270) Phone: 507-786-3981

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***Ultimately, it is the responsibility of applicants to ensure that they complete all prerequisite coursework and experiential opportunities required for successful admission to medical school.**