

# Pre-medicine

Departments  
and Programs  
in the College  
of Science

Biochemistry &  
Biophysics

Biology

Botany & Plant  
Pathology

Chemistry

Environmental  
Sciences

Geosciences

Mathematics

Microbiology

Molecular &  
Cellular Biology\*

Physics

Pre-professional  
Programs in the  
Health Sciences

Professional  
Science Masters\*

Science &  
Mathematics  
Education\*

Statistics\*

Zoology

\*graduate program only

... a pre-professional program for students who wish to pursue a career in medicine. Medicine is a respected and rewarding profession that demands dedication, perseverance, and compassion. Although medical care has become more specialized in the last decades, the physician's primary role continues to be that of healer and patient advocate. Today medical students face arduous training and years of study, but they also have wider choices than ever before. In increasing numbers, physicians devote their talents to help maintain good health. Many enter preventive medicine, public health, research, and newer areas of emphasis, such as sports medicine.

## Career Opportunities

The U.S. Department of Labor expects the employment of physicians and surgeons to grow faster than average for all occupations through the year 2014 due to continued expansion of health care industries. Job opportunities should be very good, particularly in rural and low-income areas. New physicians are likely to work as salaried employees of group medical practices, clinics, hospitals, or health networks. Most physicians undertake a residency training program of three to eight years beyond medical school in order to specialize in fields such as anesthesiology, family practice, internal medicine, pediatrics, obstetrics and gynecology, psychiatry, or surgery.

U.S. Department of Labor, Bureau of Labor Statistics. *Occupational Handbook 2006-07*

## Preparing for Medicine

Admission to medical schools is very competitive. It is based on grades, Medical College Admission Test (MCAT) scores, references, and apparent motivation. Also of importance is exposure to medicine, community service, campus activities, cultural sensitivity, and personal traits such as maturity.

Only the best-qualified students succeed. Completion of the pre-medicine program at OSU does not guarantee admission to medical school, but the program is highly regarded by admission committees in medical schools around the country and has been very successful in placing students in medical schools.

OSU graduates have solid preparation in science that qualifies them well for the demands of medical school as well as an excellent foundation in the humanities and social sciences. In addition to a rigorous academic preparation, the OSU College of Science provides an efficient, centralized advising system for students in pre-medicine.

Premed students are carefully advised and monitored throughout their preparatory curriculum.

Freshmen begin with a useful course, Pre-medicine Orientation (BI 109), which covers curriculum information and choice of major, the admission process, alternative careers, foreign schools, and other topics.

The OSU Pre-medical Society, a student organization which sponsors a variety of activities (field trips, films, and lectures by outside speakers), provides additional insights into medicine as a career.

A particularly valuable experience for premedical students is the preceptorship program. Juniors and seniors in premedicine can arrange to work with a local physician for a few hours a week observing first-hand a typical day in the life of a doctor.



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## What to know about Oregon State University

Head Advisor

College of Science  
128 Kidder Hall  
541-737-4811

OSU Admissions  
104 Kerr Administration  
541-737-4411  
800-291-4192

OSU Financial Aid  
Student Employment  
Loans & Scholarships  
College Work Study  
218 Kerr Administration  
541-737-2241

OSU Registrar  
102 Kerr Administration  
541-737-4331

OSU Housing  
102 Buxton Hall  
541-737-4771

OSU Website  
<http://oregonstate.edu>

## For more information, please contact:

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[http://www.science.orst.edu/med\\_prep.html](http://www.science.orst.edu/med_prep.html)

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## Course of Study

Students can major in one of the sciences, such as biochemistry/biophysics, biology, chemistry, microbiology, zoology, or even other areas outside of science, by combining course work taken to satisfy the basic entrance requirements for most medical schools (a year each of biology, physics, mathematics, general chemistry, and organic chemistry) with other requirements. Choosing a major in one of the usual scientific disciplines gives a student additional career options, should plans to enter medical school change.

Requirements for graduation include 48 credits needed for the baccalaureate core (BC), consisting of writing/speech (9 cr.), mathematics (3 cr.), fitness (3 cr.), physical and biological sciences (12 cr.), western culture/cultural diversity/literature & arts/social processes/difference, power, and discrimination (15 cr.), and contemporary global issues/science, technology and society (6 cr.).

## Sample Curriculum

This example is the biology major; others such as biochemistry, chemistry, microbiology, and zoology are also suitable. An official graduation checklist may be obtained from an advisor.

Freshman Year			credits		
Biology	BI 211, 212, 213	12	General Chemistry	CH 221, 222, 223 or	15
Biology Seminar	BI 198	1		CH 121, 122, 123	
Calculus	MTH 251, 252	3	Premedical Orientation	BI 109	1
BC: Fitness		3	BC: Writing I	WR 121	3
BC courses and electives		8			
Sophomore Year			credits		
Cell and Molecular Biology	BI 314	4	General Physics	PH 201, 202, 203	15
Organic Chemistry	CH 331, 332, 337	12	BC courses and electives*		15
Junior and Senior Years			credits		
General Biochemistry	BB 450, 451	7	Genetics	BI 311	4
Intro. to Statistical Methods	ST 351, 352	8	General Ecology	BI 370	3
General Microbiology	MB 302, 303	5	Organismal Biology		4-5
Evolution	BI 445	3	Principles of Physiology	Z 430	3-5
History of Science (approved WIC course)		3	Additional upper division science courses		5-6
			BC courses and electives		38-42

\*Electives should include two years of social sciences, humanities, and writing (required by the Oregon Medical School, Oregon Health and Science University).

Experience.  
Explore.  
Discover  
Achieve.

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