

# Pre-pharmacy

... a pre-professional option within a General Science bachelor's degree. This option includes the requirements to apply to OSU's Doctor of Pharmacy (Pharm.D.) program as well as other Pharm.D. programs around the country.

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

## Career Opportunities

The demand for trained pharmacy professionals has exploded in recent years due to the rapid growth of the health care and pharmaceutical industries, and the growing elderly population.

The need for pharmacists to counsel patients and work with physicians, and other health care providers continues to grow as pharmacists become more involved in drug therapy decision-making.

You will find potential for advancement and competitive salaries within a pharmacy career.

Salaries vary across the country, but in general, the starting salary of a pharmacy graduate is between \$75,000 and \$80,000 per year.

If you are thinking of becoming a pharmacist, you'll find exciting things happening in the field. The technical tasks of filling and labeling a prescription now are being delegated to support personnel and even to highly sophisticated computers and robots. This allows the pharmacist more time to counsel patients, consult with physicians, and work with health care providers to develop drug use policies. As a pharmacist, you will be the drug expert, a critical member of the health care team and an important part of the nation's health care delivery system. In the United States, the majority of pharmacists practice in community or hospital pharmacies, but pharmacists also work in nursing homes, clinics, or managed care organizations. There are opportunities within the pharmaceutical industry in pharmacy sales, marketing, and research. Pharmacists also work as teachers in an academic setting.

## Preparing for Pharmacy

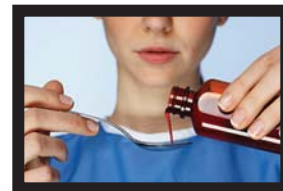
To be eligible for the four-year Doctor of Pharmacy professional program, students must complete the pre-pharmacy curriculum, which involves a minimum of three years of undergraduate study. Required courses include general chemistry, organic chemistry, biology, human physiol-

ogy, physics, and microbiology; cell and molecular biology; calculus for health sciences or business; writing and interpersonal communications; micro- or macroeconomics; statistics; and general psychology. All science course work must be for science majors. You will also need CPR and first aid certification. A bachelor's degree is not required for admission to OSU's Pharm.D. program. However, students must earn a bachelor's degree prior to entering their third professional year. The General Science, pre-pharmacy option is designed to allow students to complete required course work for admission to OSU's Pharm.D. program and to complete a bachelor's degree either before admission, or during the first two years of the Pharm.D. program. Other degrees such as Biochemistry/Biophysics, Biology, Botany, Chemistry, or Microbiology are possible choices for a pre-pharmacy student and can provide more career options.

Advising for the pre-pharmacy students is done by the College of Pharmacy, 203 Pharmacy Building, 541-737-3424. Three terms prior to graduation, students should file an application to graduate with the

Registrars office and then make an appointment with the Head Advisor in the College of Science who will perform the graduation audit.

Satisfactory completion of the OSU course work facilitates, but does not guarantee, admission to a Pharm.D. program, since individual applicants are selected on a competitive basis.



# General Science/ Pre-pharmacy

## Course of Study

To graduate from OSU, a student completes 48 credits of baccalaureate core (BC) courses, consisting of writing/speech, mathematics, fitness, physical and biological sciences (27 cr.); western culture; cultural diversity; literature & arts; social processes and institutions; difference, power, and discrimination (15 cr.); contemporary global issues; and science, technology and society (6 cr.) as well as the science and math courses required for the degree.

## Sample Curriculum

An official graduation checklist may be obtained from an advisor.

### What to know about Oregon State University

Head Advisor, Pharmacy  
College of Pharmacy  
203 Pharmacy Building  
541-737-3424

Head Advisor, Science  
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 Website  
<http://oregonstate.edu>

### For more information, please contact:

College of Pharmacy Advising  
Oregon State University  
203 Pharmacy Building  
Corvallis, Oregon 97331-3507  
phone: 541-737-3424  
fax: 541-737-3999

email: [pharmacy@oregonstate.edu](mailto:pharmacy@oregonstate.edu)  
<http://pharmacy.oregonstate.edu/>  
<http://catalog.oregonstate.edu/OptionDetail.aspx?code=583&majorid=233>

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Freshman Year			credits			Sophomore Year			credits		
General Chemistry	CH 221, 222, 223	15	Organic Chemistry	CH 331, 332, 337	12						
Calculus	MTH 241 OR 251	4	General Physics	PH 201, 202, 203	15						
General Biology	BI 211, 212, 213	12	BC: Writing III	COMM 218	3						
BC: Writing I	WR 121	3	Principles of Statistics	ST 201	3						
BC: Writing II		3	Additional Math, Statistics or Computer Science to complete 12 credits of mathematical sciences.		5						
BC: Fitness	HHS 231 + HHS 241-248	3	BC: Cultural Diversity; Literature & Arts; Diff. Power & Discrimination		9						
BC: General Psychology	PSY 201	3									
BC: Western Culture		3									
Junior Year			credits			Senior Year			credits		
Principles/Vertebrate Physiology	Z 430, 431, 432	12	Additional courses from upper division science or first year professional pharmacy courses to total 36 credits of upper division science (24 upper division science if organic chemistry is taken at a community college).								
Cell & Molecular Biology	BI 314	4									
General Microbiology	MB 302, 303	5	Recommend: BB 450, 451 (Biochemistry) - 4, 3, cr. BI 311 (Genetics) - 4 cr. CH 324 (Quantitative Analysis) - 4 cr. MB 480 (Parasitology) - 3 cr. BI 445 (Evolution) - 3 cr.								
BC: Contemporary Global Issues	Rec. H 312	3									
BC: Science, Technology & Society	Rec. PHAR 321 OR HSTS 415, 417, 419, 422, OR 425	3	A total of 180 credits with 60 upper division (courses numbered 300 & above) is required to graduate.								
BC: Writing Intensive Course (WIC)	PHAR 432 + 321; OR HSTS 415, 417, 419, 422, OR 425; OR PHAR 729	3									
Also required for admission to OSU's Pharm D. program: Adv. Human Anatomy & Physiology Lab											
	Z 441, 442, 443	8									
Micro or Macroeconomics	ECON 201 OR 202	4									

Experience.  
Explore.  
Discover  
Achieve.

**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\***

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