

**Wabash College**  
**Health Professions Handbook**  
**Part I**

**By**  
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**(Revised 8/06)**

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## Introduction

A decision to pursue a career in the health professions requires quite a bit of investigation as well as an honest self-evaluation. The Pre-Health Professions Advisor and the Chairman of the Pre-Health Professions Advisory Committee are available to assist you at any step along the way – from examination of your interests and abilities to practical support during the application process.

This handbook is designed to give you some important information to help you with your decision to enter the health professions. It also contains helpful information about the admission requirements of professional schools, helpful internet resources, and resources provided by Wabash College to assist you.

This is a *Handbook* and not intended to be your only source of information regarding a career in the health professions. You are encouraged to take advantage of the many helpful materials available in the library and over the Internet, as well.

## The Health Professions Office

The Health Professions Office is located in the Arnold House, which is at 502 West Wabash Avenue. The staff consists of: the Pre-Health Advisor, Mrs. Jill Rogers; the Chairman of the Pre-Health Professions Advisory Committee, Dr. John Munford; and the Pre-Health Professions Program Assistant, Mrs. Rochella Endicott. Mrs. Rogers and Dr. Munford will provide timely seminars and workshops for interested pre-health students. In addition, Mrs. Rogers and Dr. Munford are available for one on one counseling as you explore your future career options.

	<i>Location</i>	<i>Phone #</i>	<i>Email</i>	<i>Office Hours</i>
Mrs. Jill Rogers	2 <sup>nd</sup> Floor Schroeder House	6171	rogersji	M T W, Th 10:30 – 2:30
Dr. John Munford	Hays Hall 222	6202	munfordj	M W F 2:00 – 3:00 Th 9:45 – 11:00
Mrs. Rochella Endicott	Hays Hall 108	6273	endicotr	M – F 7:30 – 3:30

Office hours will change slightly each semester. Please check with Mrs. Endicott for the most recent office hours.

## General Four Year Calendar

The following is a general guide to events that are important to students interested in a career in one of the health professions. This is a general guide only. Therefore, specific dates for events are not listed but are indicated by semester of normal occurrence only. The specific times of these events will be posted and announced by e-mail.

<b>Year</b>	<b>Semester</b>	<b>Event</b>	<b>Purpose</b>
Year 1	Fall	• Pre-Health Orientation	Introduce first year students to the requirements of health professional schools and explain what Wabash does to help at each stage
Year 1 or Year 2	Fall	•IU School of Medicine Director of Admissions	Students get to hear first hand what medical schools are looking for
	Spring	•Pre-Health Meeting	Discuss the timeline for applying to health professional schools, discuss specific information about required courses, answer questions
		•Trip to IU School of Medicine	Students get to tour IU SOM campus and meet with a medical student panel

<b>Year</b>	<b>Semester</b>	<b>Event</b>	<b>Purpose</b>
Year 3	Fall	•Informational Meeting for juniors	Students obtain a detailed checklist for applying to health professional schools
	Spring	•Preparation for entrance exam (i.e. MCAT, DAT, GRE, PCAT, OAT, etc.)	Each health profession requires a specific exam e.g. medical school requires the MCAT, dental school requires the DAT, etc.
		•Register for entrance exams	
		•Practice MCATs	Wabash offers students 2 full-length practice MCATs to help students gain test taking experience and to help students gauge preparedness
		•Informational Meeting	The procedure of evaluations is discussed, application process

		<ul style="list-style-type: none"> <li>•Complete and Return The Wabash on-line application.</li> <li>•Take entrance exams (i.e. MCAT, DAT, GRE, PCAT, OAT, etc.)</li> <li>•Complete and submit Application Forms specific for health profession of choice</li> </ul>	<p>reviewed, and suggestions for writing the Personal Statement are made. The on-line application must be submitted before the Pre-Health Professions Advisory Committee will begin the recommendation process for you.</p> <p>For medical, dental, veterinary, pharmacy, and physician assistant schools, one standardized application form is completed and sent to the schools requested by the student. For other health professions, students apply individually to each school.</p>
Summer			

<b>Year</b>	<b>Semester</b>	<b>Event</b>	<b>Purpose</b>
Year 4	Fall	<ul style="list-style-type: none"> <li>•Informational Meeting for seniors</li> <li>•Mock Interviews</li> <li>•Retake Entrance Exams (if necessary)</li> <li>•Complete Secondary Applications</li> <li>•Professional School Interviews</li> </ul>	<p>The procedure for sending out committee letters will be discussed, the application process will be reviewed, and suggestions for the interview will be made</p> <p>Students get to practice their interviewing skills and receive helpful feedback from professionals</p>
	Spring	<ul style="list-style-type: none"> <li>•Final Decisions on Offers of Acceptance</li> </ul>	

## Internet Resources for Pre-Health Students

### Good Pre-Health Web Sites from Other Colleges:

University of Chicago [pre-health.uchicago.edu](http://pre-health.uchicago.edu)

Yale [yale.edu/career/students/careers\\_in/health\\_professions.html](http://yale.edu/career/students/careers_in/health_professions.html)

Syracuse University [hpap.syr.edu](http://hpap.syr.edu)

### General Health Professions Web Sites:

<http://uts.cc.utexas.edu/~knauft/resources/index.html>

[www.explorehealthcareers.org](http://www.explorehealthcareers.org)

### Allopathic Medical Doctor (M.D.)

American Association of Medical Colleges (AAMC)

[www.aamc.org](http://www.aamc.org)

This is the first place to go for premedical information. This site includes information about MCAT, AMCAS, post-baccalaureate programs, MD/PhD programs, and more.

Student Doctor Network

[studentdoctor.net/index.asp](http://studentdoctor.net/index.asp)

This site includes medical student diaries, MCAT information, essay workshop, and interview feedback. The interview feedback is an amazing database that includes candid reports about interview questions and pitfalls from medical school applicants for every medical school.

American Medical Association (AMA)

[www.ama-assn.org](http://www.ama-assn.org)

This site has good information on becoming an MD, articles and resources on important topics in medicine such as ethics and legal issues, and access to the medical publication JAMA.

Medical Scientist Training Programs

[www.intransit.us/](http://www.intransit.us/)

This site give information and feedback about MD/PhD degrees and selection of MSTP programs.

Indiana University School of Medicine

[www.medicine.iu.edu](http://www.medicine.iu.edu)

This site provides information about admissions requirements, statistics, cost, etc.

Next Generation

[www.NextGenMD.org](http://www.NextGenMD.org)

This is a free, nonprofit online publication written to help premedical students develop an understanding of the field of medicine. The site, which is written and managed by undergraduate premedical students, contains information about the real-world experiences of physicians and explores issues of the heart at the medical profession.

### **Osteopathic Medical Doctor (D.O.)**

American Association of Colleges of Osteopathic Medicine (AACOM)

[www.aacom.org](http://www.aacom.org)

This site contains information about how to apply to an osteopathic medical school, information about each of the 19 colleges, and access to AACOMSAS, the osteopathic colleges application service.

American Osteopathic Association (AOA)

[www.DO-Online.org](http://www.DO-Online.org)

At this site, you can find a mentor and important links to other osteopathic organizations.

[www.andrewtaylorstill.com/meded.htm](http://www.andrewtaylorstill.com/meded.htm)

This is a good site to start with if you want to compare the different philosophies of osteopathic and allopathic medicine.

### **Dentist (D.D.S.)**

American Dental Education Association (ADEA)

[www.adea.org](http://www.adea.org)

This site contains dental school links and access to AADSAS, the dental school application service.

American Dental Association (ADA)

[www.ada.org](http://www.ada.org)

This site includes information about education and careers, access to DAT registration, and access to dental publications including JADA and Today's News.

[PreDental.com](http://PreDental.com)

This site has career information, sample AADSAS essays, and sample interview questions.

### **Pharmacist (Pharm. D.)**

Association of Colleges of Pharmacy

[www.aacp.org](http://www.aacp.org)

This site contains information on pharmacy schools, related pharmacy organizations, a section for pre-pharmacy students that talks about admissions, and access to PharmCAS, the Pharmacy College Application Service.

### **Optometrist (O.D.)**

Association of Schools and Colleges of Optometry (ASCO)

[www.opted.org](http://www.opted.org)

This site contains information on optometry schools, OAT, a career in optometry and more.

American Optometric Association (AOA)

<http://www.aoanet.org>

This site includes information on the American Optometric Student Association, careers in optometry, and information on residencies.

### **Veterinarian (D.V.M.)**

Association of American Veterinary Medical Colleges (AAVMC)

[www.aavmc.org](http://www.aavmc.org)

This site contains access to VMCAS (Veterinary Medical College Application Service), admissions information, and listings of the US veterinary schools and colleges.

American Veterinary Medical Association (AVMA)

[www.avma.org](http://www.avma.org)

This site includes access to the veterinary publications JAVMA and American Journal of Veterinary Research as well as relevant articles and hot topics in veterinary medicine.

### **Physical Therapist (D.P.T.)**

American Physical Therapy Association (APTA)

[www.apta.org](http://www.apta.org)

This site contains information about the profession and admissions information and listings of the US Physical Therapy schools.

### **Physician Assistant (P.A.)**

American Academy of Physician Assistants

[www.aapa.org](http://www.aapa.org)

This site contains general information about physician assistants, links to CASPA, the web-based application service, listings of the US PA programs, and information about related PA organizations.

Association of Physician Assistant Programs

[www.apap.org](http://www.apap.org)

This site contains general information about PAs and the PA profession as well as data and statistics about salary and projected employment.

### **Podiatry (D.P.M.)**

American Podiatric Medical Association (APMA)

[www.apma.org](http://www.apma.org)

This site has information about careers in podiatric medicine as well as access to the Journal of American Podiatric Medical Association.

American Association of Colleges of Podiatric Medicine (AACPM)

[www.aacpm.org](http://www.aacpm.org)

At this site, you can learn about the colleges of podiatric medicine, about podiatric medicine as a career, and even apply to a podiatric college on-line.

### **Public Health (M.P.H.)**

Association of Schools of Public Health (ASPH)

[www.asph.org](http://www.asph.org)

This site includes general information about the field of public health and listings of all of the Schools of Public Health.

PublicHealthJobs.net

[www.publichealthjobs.net](http://www.publichealthjobs.net)

This site, a service of ASPH Employment Council, allows you to search for jobs available in public health.

### **Chiropractor (D.C.)**

Association of Chiropractic Colleges (ACC)

[www.chirocolleges.org](http://www.chirocolleges.org)

This site includes general information about chiropractic medicine and listings for all of the Chiropractic Colleges.

## Professional Profiles

A wide variety of career options are available in the Health Professions. We encourage you to consider all of them carefully before deciding on your personal career path.

The following are descriptions of and admissions requirements for seven of the major health professions:

### Medicine

#### The Physician:

There are two different types of physicians, allopathic and osteopathic. These differ from each other mainly in their philosophy of patient care and the degree granted (allopathic physicians receive an M.D. and osteopathic physicians receive a D.O.). Both types of physicians can specialize in any area and there are no distinctions as far as eligibility for residency programs.

#### The Pre-requisites:

The necessary prerequisite courses vary slightly among institutions. However, most medical school programs require:

Requirement	Wabash Course (Credits)	Course Title	Semester Offered	Course Prerequisite
1 Year Biology	Bio 111 (1)	General Biology	Fall	---
	Bio 112 (1)	General Biology	Spring	Bio 111
1 Year Inorganic Chemistry	Chem 111 (1)	General Chemistry	Fall	---
	Chem 231 (½)	Quantitative Chem	Spring	Chem 111 Math 111
	Chem 241 (½)	Descriptive Chem	Spring	Chem 222
1 Year Organic Chemistry	Chem 221 (1)	Organic Chem I	Spring	Chem 111
	Chem 222 (1)	Organic Chem II	Fall	Chem 221
1 Year Physics	Physics 111 (1)	General Physics	Fall	Math 111
	Phy 112 or 113 (1)	General Physics	Spring	Physics 111
1 or 2 Semester(s) Calculus**	Math 111 (1)	Calculus I	Fall, Spring	Placement Exam
	Math 112 (1)	Calculus II	Fall, Spring	Math 111 or Dept. permission
1 or 2 Semester(s) English Composition**	Eng 101 (1/2-1)	Composition	Fall	Dept. permission
	Eng 201 (1/2)	Composition: The Essay	First half Spring	---
	Eng 410 (1)	Advanced Composition: Acad. and Prof. writing	Spring	Jr. or Sr. or Dept. permission
	Eng 411 (1)	Advanced Composition: Bus. And Tech. Writing	Spring	Jr. or Sr. or Dept. permission

\*\* There is variation among medical schools with regard to the amount of Math and English required. Almost all medical schools require 1 semester of Calculus but only some require 2 semesters. The amount of English Composition required varies from 0 courses to 2 courses.

The exact prerequisites for IU School of Medicine are listed below.

Students can learn more about core prerequisite course requirements for each medical school program at the Association of American Medical Colleges (AAMC) web site (<http://www.aamc.org>) or the American Association of Colleges of Osteopathic Medicine (AACOM) web site (<http://www.aacom.org>).

There is a centralized application process for medical school programs (The application service for allopathic medical schools is called AMCAS and for osteopathic medical schools is called AACOMAS). The standardized test required for entrance into all medical school programs is the Medical College Admission Test (MCAT).

Typically, a student needs a minimum GPA of 3.5 on a 4.0 scale to be a competitive candidate.

### **The Education and the Degree:**

Medical school takes four years to complete. All medical school students are also required to pass two national board examinations (USMLE Step1 and 2) before they can graduate from medical school. A third exam (USMLE Step3) must be passed before you can practice medicine independently.

#### **INDIANA UNIVERSITY SCHOOL OF MEDICINE—ADMISSION REQUIREMENTS \***

<b>IU Requirement</b>	<b>Wabash Course (Credits)</b>	<b>Course Title</b>	<b>Semester Offered *</b>	<b>Course Prerequisite</b>
1 Year Biology	Bio 111 (1)	General Biology	Fall	---
	Bio 112 (1)	General Biology	Spring	Bio 111
1 Year Inorganic Chemistry	Chem 111 (1)	General Chemistry	Fall	---
	Chem 231 (½)	Quantitative Chem	Spring	Chem 111 Math 111
	Chem 241 (½)	Descriptive Chem	Spring	Chem 222
1 Year Organic Chemistry	Chem 221 (1)	Organic Chem I	Spring	Chem 111
	Chem 222 (1)	Organic Chem II	Fall	Chem 221
1 Year Physics	Physics 111 (1)	General Physics	Fall	Math 111
	Phy 112 or 113 (1)	General Physics	Spring	Physics 111

IU School of Medicine also requires a “significant number of courses in the humanities and social/behavioral sciences,” as well as competency in written and spoken English.

\* As of Academic Year 2006-07.

## Dentistry

### The Dentist:

Dentistry is a health profession that is devoted to maintaining the health of the teeth and gums. Dentistry can offer you a rewarding career in service to others, the opportunity for self-employment, status and prestige, and a good earning potential.

### The Pre-requisites:

The necessary prerequisite courses vary significantly among institutions. However, most dental school programs require:

Requirement	Wabash Course (Credits)	Course Title	Semester Offered	Course Prerequisite
1 Year Biology	Bio 111 (1)	General Biology	Fall	---
	Bio 112 (1)	General Biology	Spring	Bio 111
1 Year Inorganic Chemistry	Chem 111 (1)	General Chemistry	Fall	---
	Chem 231 (½)	Quantitative Chem	Spring	Chem 111 Math 111
	Chem 241 (½)	Descriptive Chem	Spring	Chem 222
1 Year Organic Chemistry	Chem 221 (1)	Organic Chem I	Spring	Chem 111
	Chem 222 (1)	Organic Chem II	Fall	Chem 221
1 Year Physics	Physics 111 (1)	General Physics	Fall	Math 111
	Phy 112 or 113 (1)	General Physics	Spring	Physics 111
1 Semester Calculus	Math 111 (1)	Calculus I	Fall, Spring	Placement Exam

\* \* There is variation among dental schools with some requiring many more specific courses such as Psychology, Physiology, Anatomy or English Composition so it is very important that you investigate the prerequisites at the dental schools of your choice.

The exact prerequisites for IU School of Dentistry are listed below.

Students can learn more about core prerequisite course requirements for each dental school program at the American Dental Education Association (ADEA) web site (<http://www.adea.org>).

There is a centralized application process for dental school programs (The Associated American Dental Schools Application Service (AADSAS). The standardized test required for entrance into all dental school programs is the Dental Admission Test (DAT).

Typically, a student needs a minimum GPA of 3.3 on a 4.0 scale to be a competitive candidate.

### The Education and the Degree:

Dental school takes four years to complete. Dental students must also pass two national board examinations (National Board Dental Examinations Part I and II) before graduation. General Dentistry does not require further education but other specialties such as Orthodontics, Oral and Maxillofacial Surgery, etc. require between 12 and 36 months depending on the field.

INDIANA UNIVERSITY SCHOOL OF DENTISTRY—ADMISSION  
REQUIREMENTS \*

<b>IU Requirement</b>	<b>Wabash Course (Credits)</b>	<b>Course Title</b>	<b>Semester Offered *</b>	<b>Course Prerequisite</b>
1 Year Biology	Bio 111 (1)	General Biology	Fall	---
	Bio 112 (1)	General Biology	Spring	Bio 111
1 Semester Anatomy	Bio 221(1)	Comparative Anatomy of Vert.	Fall	Bio 101 or Bio 112
1 Semester Physiology (lab not required)	Bio 315 (1)	Organismal Physiology	Fall—'05 alternate yrs	Bio 212 or permission
1 Year Inorganic Chemistry	Chem 111 (1)	General Chemistry	Fall	---
	Chem 231 (½)	Quantitative Chem	Spring	Chem 111 Math 111
	Chem 241 (½)	Descriptive Chem	Spring	Chem 222
1 Semester Organic Chemistry	Chem 221 (1)	Organic Chem I	Spring	Chem 111
1 Semester Biochemistry (lab not required)	Chem 361 (1)	Biochemistry	Spring	Chem 222; 231 or concurrent
1 Year Physics	Physics 111 (1)	General Physics	Fall	Math 111
	Phy 112 or 113 (1)	General Physics	Spring	Physics 111
1 Semester Psychology	Psych 101 (1)	General Psychology	Fall, Spring	---
1 Semester English Composition	Eng 101 (½ or 1) or Eng 201 (½)	Composition or Comp: The Essay	Fall First half of Spring	Dept. permission  ---

\* As of Academic Year 2006-07.

## Physical Therapy

### The Physical Therapist:

The physical therapist works with patients to help improve their strength and mobility, relieve pain, and prevent or limit permanent physical impairment. A physical therapist's duties may range from rehabilitation of accident victims, to educating in the schools and community on health issues, to sports-related assessment, conditioning and preventive medicine.

### The Pre-requisites:

The necessary prerequisite courses vary significantly among institutions. However, most physical therapy programs require:

Requirement	Wabash Course (Credits)	Course Title	Semester Offered	Course Prerequisite
1 Year Biology	Bio 111 (1) Bio 112 (1)	General Biology General Biology	Fall Spring	--- Bio 111
1 Year Physics	Physics 111 (1) Phy 112 or Phy 113 (1)	General Physics General Physics	Fall Spring	Math 111 Physics 111
1 Year Chemistry	Chem 111 (1) Chem 221 (1)	General Chemistry Organic Chem I	Fall Spring	--- Chem 111

\*\*Additional coursework in the social and behavioral sciences is strongly recommended.

Students can learn more about core prerequisite course requirements for each physical therapy program at the American Physical Therapy Association (APTA) web site (<http://www.apta.org>). Once at this web site click on Education then Accreditation, and then Directory of Accredited Physical Therapy Education Programs.

There is no centralized application process for physical therapy programs therefore each school must be applied to individually. The standardized test required for entrance into most physical therapy programs is the Graduate Record Examination (GRE).

Typically, a student needs a minimum GPA of 3.0 on a 4.0 scale.

### The Education and the Degree:

All physical therapists are college graduates. Currently, baccalaureate, master's and doctoral degree training programs exist in the field of physical therapy. However, the trend is to eliminate baccalaureate degree programs in favor of graduate degrees. It is predicted that by 2020 the Doctorate in Physical Therapy (DPT) will be the degree of choice for practitioners. The DPT takes 2.5 to 3 years to complete depending on the program.

All physical therapists are also required to take a national examination and be licensed by the state in which they practice.

# Optometry

## The Optometrist:

Optometrists are independent primary health care providers who examine, diagnose, treat and manage diseases and disorders of the eye. In addition to prescribing and fitting glasses and contact lenses, optometrists are trained to evaluate any patient's visual condition and to determine the best treatment for that condition.

## The Pre-requisites:

The necessary prerequisite courses vary significantly among institutions. However, most optometry school programs require:

Requirement**	Wabash Course (Credits)	Course Title	Semester Offered	Course Prerequisite
1 Year Biology	Bio 111 (1)	General Biology	Fall	---
	Bio 112 (1)	General Biology	Spring	Bio 111
1 Semester Microbiology	Bio225 (1)	Microbiology	Fall	Bio 111 and Bio112
1 Year Inorganic Chemistry	Chem 111 (1)	General Chemistry	Fall	---
	Chem 231 (½)	Quantitative Chem	Spring	Chem 111 Math 111
	Chem 241 (½)	Descriptive Chem	Spring	Chem 222
1 Semester Organic Chemistry	Chem 221 (1)	Organic Chem I	Spring	Chem 111
1 Year Physics	Physics 111 (1)	General Physics	Fall	Math 111
	Phy 112 or 113 (1)	General Physics	Spring	Physics 111
1 Semester Calculus	Math 111 (1)	Calculus I	Fall, Spring	Placement Exam
1 Semester Statistics	Math 217 (1)	Introduction to Statistics	Spring	Math 111
1 Semester Psychology	Psy 101 (1)	General Psychology	Fall, Spring	none
1 or 2 Semester(s) English Composition	Eng 101 (1/2-1)	Composition	Fall	Dept. permission
	Eng 201 (1/2)	Composition: The Essay	First half Spring	---
	Eng 410 (1)	Advanced Composition: Acad. and Prof. writing	Spring	Jr. or Sr. or Dept. permission
	Eng 411 (1)	Advanced Composition: Bus. And Tech. Writing	Spring	Jr. or Sr. or Dept. permission

\*\* There is variation among optometry schools with some requiring many more specific courses such as Anatomy, Physiology, and Biochemistry so it is very important that you investigate the prerequisites at the optometry school of your choice.

The exact prerequisites for IU School of Optometry are listed on the back of this sheet.

Students can learn more about core prerequisite course requirements for each optometry school program at the Association of Schools and Colleges of Optometry (ASCO) web site (<http://www.opted.org>)

There is not a centralized application process for optometry school programs so you must apply to each school individually. The standardized test required for entrance into all optometry school programs is the Optometry Admission Test (OAT).

Typically, a student needs a minimum GPA of 3.2 on a 4.0 scale to be a competitive candidate.

**The Education and the Degree:**

Optometry school takes four years to complete. All optometry school students are also required to pass a national board examination (NBEO Part1) before they can graduate from optometry school.

**INDIANA UNIVERSITY SCHOOL OF OPTOMETRY—ADMISSION REQUIREMENTS \***

Requirement	Wabash Course (Credits)	Course Title	Semester Offered	Course Prerequisite
1 Year Biology	Bio 111 (1)	General Biology	Fall	---
	Bio 112 (1)	General Biology	Spring	Bio 111
1 Semester Microbiology	Bio225 (1)	Microbiology	Fall	Bio 111 and Bio112
1 Semester Advanced Biology	Bio 221 (1) <b>or</b> Bio 315	Comparative Anatomy <b>or</b> Organismal Physiology	Fall Fall, alternate years	Bio 112 Bio 212 or permission
1 Year Inorganic Chemistry	Chem 111 (1)	General Chemistry	Fall	---
	Chem 231 (½)	Quantitative Chem	Spring	Chem 111 Math 111
	Chem 241 (½)	Descriptive Chem	Spring	Chem 222
1 Semester Organic Chemistry	Chem 221 (1)	Organic Chem I	Spring	Chem 111
1 Year Physics	Physics 111 (1)	General Physics	Fall	Math 111
	Phy 112 or 113 (1)	General Physics	Spring	Physics 111
1 Semester Calculus	Math 111 (1)	Calculus I	Fall, Spring	Placement Exam
1 Semester Statistics	Math 217 (1)	Introduction to Statistics	Spring	Math 111
1 Semester Psychology	Psy 101 (1)	General Psychology	Fall, Spring	none
1 Semester English Composition	Eng 101 (1/2-1)	Composition	Fall	Dept. permission
	Eng 201 (1/2)	Composition: The Essay	First half Spring	---
	Eng 410 (1)	Advanced Composition: Acad. and Prof. writing	Spring	Jr. or Sr. or Dept. permission
	Eng 411 (1)	Advanced Composition: Bus. And Tech. Writing	Spring	Jr. or Sr. or Dept. permission

\* As of Academic Year 2006-07.

## Pharmacy

### The Pharmacist:

A pharmacist is a licensed health professional who provides information regarding medication to consumers and health care professionals. Pharmacists are ‘medication experts’, concerned with disease state management and safe guarding the public’s health in matters relating to medication distribution and use.

### The Pre-requisites:

The necessary prerequisite courses vary significantly among institutions. However, most pharmacy schools require:

Requirement	Wabash Course (Credits)	Course Title	Semester Offered	Course Prerequisite
1 Year Biology	Bio 111 (1)	General Biology	Fall	---
	Bio 112 (1)	General Biology	Spring	Bio 111
1 Year Inorganic Chemistry	Chem 111 (1)	General Chemistry	Fall	---
	Chem 231 (½)	Quantitative Chem	Spring	Chem 111 Math 111
	Chem 241 (½)	Descriptive Chem	Spring	Chem 222
1 Year Organic Chemistry	Chem 221 (1)	Organic Chem I	Spring	Chem 111
	Chem 222 (1)	Organic Chem II	Fall	Chem 221
1 or 2 Semester(s) Physics **	Physics 111 (1)	General Physics	Fall	Math 111
	Phy 112 or 113 (1)	General Physics	Spring	Physics 111
1 Semester Calculus	Math 111 (1)	Calculus I	Fall, Spring	Placement Exam
1 or 2 Semester(s) English Composition**	Eng 101 (1/2-1)	Composition	Fall	Dept. permission
	Eng 201 (1/2)	Composition: The Essay	First half Spring	---
	Eng 410 (1)	Advanced Composition: Acad. and Prof. writing	Spring	Jr. or Sr. or Dept. permission
	Eng 411 (1)	Advanced Composition: Bus. And Tech. Writing	Spring	Jr. or Sr. or Dept. permission

\*\*There is considerable variation among pharmacy schools with regard to the amount of Physics & English required. The Purdue Pharmaceutical program requires Anatomy & Physiology, 2 semesters of Calculus, Economics and Microbiology, in addition to the above courses. It is important to visit individual school admission sites to understand the specific prerequisites.

Students can learn more about core prerequisite course requirements for each pharmacy school at the Association of Colleges of Pharmacy (ACCP) web site (<http://www.aacp.org>).

There is a centralized application process for pharmacy school programs (The Pharmacy College Application Service (PharmCAS)). The standardized test required for entrance into ~1/2 pharmacy school programs is the Pharmacy College Admission Test (PCAT)(<http://www.pcatweb.info>).

Typically, a student needs a minimum GPA of 3.0 on a 4.0 scale to be a competitive candidate.

**The Education and Degree:**

The Doctor of Pharmacy (Pharm.D.) degree program requires at least 2-years of specific pre-professional (undergraduate) coursework followed by 4-academic years (or 3-calendar years) of professional study. Pharmacy colleges and schools may accept students directly from high school for both the pre-pharmacy and pharmacy curriculum, or after completion of the college course prerequisites. The majority of students enter a pharmacy program with 3 or more years of college experience. College graduates who enroll in a pharmacy program must complete the full 4-academic years (or 3-calendar) years of professional study to earn the Pharm.D. degree. The AACP does not track the availability of accelerated programs of study for individuals with a baccalaureate degree in a related health career or science field.

After graduating from pharmacy school, an increasing number of students are seeking residency training in pharmacy practice. Over 400 pharmacy residency programs are offered in hospitals, community pharmacies, and some specialized facilities. These residency programs may be taken in general pharmacy practice, clinical pharmacy practice, or other specialty areas depending upon personal interests and specific career requirements. Completion of a pharmacy residency is sometimes a requirement for employment in hospital pharmacy practice or as clinical faculties at pharmacy schools

## Veterinary Medicine

### The Veterinarian:

The veterinarian primarily prevents and treats animal disease. Veterinarians also play a role in ensuring the safety of food and controlling diseases transmitted from animals. The majority of veterinarians are in private practice, although significant numbers are involved in preventive medicine, regulatory or military veterinary medicine, laboratory animal medicine, research and development in industry, and teaching and research in academia.

### The Pre-requisites:

The necessary prerequisite courses vary significantly among institutions. However, most veterinary school programs require:

Requirement*	Wabash Course (Credits)	Course Title	Semester Offered	Course Prerequisite
1 Year Biology	Bio 111 (1)	General Biology	Fall	---
	Bio 112 (1)	General Biology	Spring	Bio 111
Biochemistry	Chem 361 (1)	Biochemistry	Spring	Chem 222 Chem231
Genetics	Bio 211 (1)	Genetics	Fall	Bio 112
Microbiology	Bio 225 (1)	Microbiology	Fall	Bio 111 Bio 112
1 Year Inorganic Chemistry	Chem 111 (1)	General Chemistry	Fall	---
	Chem 231 (½)	Quantitative Chem	Spring	Chem 111 Math 111
	Chem 241 (½)	Descriptive Chem	Spring	Chem 222
1 Year Organic Chemistry	Chem 221 (1)	Organic Chem I	Spring	Chem 111
	Chem 222 (1)	Organic Chem II	Fall	Chem 221
1 Year Physics	Physics 111 (1)	General Physics	Fall	Math 111
	Phy 112 or 113 (1)	General Physics	Spring	Physics 111
1 Semester Calculus	Math 111 (1)	Calculus I	Fall, Spring	Placement Exam
1 or 2 Semester(s) English Composition	Eng 101 (1/2-1)	Composition	Fall	Dept. permission
	Eng 201 (1/2)	Composition: The Essay	First half Spring	---
	Eng 410 (1)	Advanced Composition: Acad. and Prof. writing	Spring	Jr. or Sr. or Dept. permission
	Eng 411 (1)	Advanced Composition: Bus. And Tech. Writing	Spring	Jr. or Sr. or Dept. permission

\* \*There is variation among veterinary schools with some requiring many more specific courses such as Anatomy, Physiology, Cell Biology, Embryology, and Statistics so it is very important that you investigate the prerequisites at the veterinary school of your choice.

The exact prerequisites for Purdue University School of Veterinary Medicine are listed on the back of this sheet.

Students can learn more about core prerequisite course requirements for each veterinary school program at the Association of American Veterinary Medical Colleges (AAVMC) (<http://www.aavmc.org>).

There is a centralized application process for veterinary school programs (VMCAS). All veterinary school programs accept the Graduate Record Exam (GRE) as

the standardized test required for entrance and a few schools will also accept the Medical College Admission Test (MCAT).

Typically, a student needs a minimum GPA of 3.2 on a 4.0 scale to be a competitive candidate.

### The Education and the Degree:

Veterinary medical school takes four years to complete. All veterinary school students are also required to pass a national board examination before they can apply for a license to practice.

## PURDUE UNIVERSITY VETERINARY SCHOOL—ADMISSION REQUIREMENTS \*

Purdue Requirement	Semesters	Wabash Course (Credits)**	Course Title	Semester Offered	Course Prerequisite
Biology (general)	2	Bio 111 (1)	General Biology	Fall	---
		Bio 112 (1)	General Biology	Spring	Bio 111
Inorganic Chemistry	2	Chem 111 (1)	General Chemistry	Fall	---
		Chem 231 (½)	Quantitative Chem	Spring	Chem 111 Math 111
		Chem 241 (½)	Descriptive Chem	Spring	Chem 222
Organic Chemistry	2	Chem 221 (1)	Organic Chem I	Spring	Chem 111
		Chem 222	Organic Chem II	Fall	Chem 221
Biochemistry	1	Chem 361 (1)	Biochemistry	Spring	Chem 222; 231 or concurrent
Microbiology	1	Bio 225 (1)	Microbiology	Fall	Bio 111 and 112
Nutrition (Animal)	1	Not offered	---	---	---
Physics	2	Physics 111 (1)	General Physics	Fall	Math 111
		Phy 112 or 113 (1)	General Physics	Spring	Physics 111
Calculus	1	Math 111 (1)	Calculus	Fall, Spring	Math placement exam
		Math 112 (1)	Calculus II	Fall, Spring	Math 111
Genetics	1	Bio 211 (1)	Genetics	Fall	Bio 112
English Composition	1	Eng 101 (½ or 1) or Eng 201 (½)	Composition or Comp: The Essay	Fall Spring	---
		Eng 410 (1) or Eng 411 (1)	Advanced Composition	Spring	Jr. or Sr.
Speech	1	Speech 101(1)	Fundamentals of Speech	Fall, Spring	---
Statistics	1	Mat 217 (1)	Statistics	Spring	Math 111
Humanities (includes languages, cognitive sciences, and social sciences)	3				

\* As of Academic Year 2006-07. No less than a grade of C must be received in each required course.

## Physician Assistant

### The Physician Assistant:

Physician Assistants (PAs) are health professionals licensed to practice medicine with physician supervision. PAs conduct physical exams, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery and in most states can write prescriptions.

### The Pre-requisites:

The necessary prerequisite courses vary significantly among institutions. However, most physician assistant programs require:

Requirement*	Wabash Course (Credits)	Course Title	Semester Offered	Course Prerequisite
1 Year Biology	Bio 111 (1)	General Biology	Fall	---
	Bio 112 (1)	General Biology	Spring	Bio 111
Anatomy	Bio 221 (1)	Comparative Anatomy and Embryology of the Vertebrates	Fall	Bio 112
Physiology	Bio 315 (1)	Organismal Physiology	Fall, Alternate Years	Bio 212
Microbiology	Bio 225 (1)	Microbiology	Fall	Bio 111 Bio 112
1 Year Inorganic Chemistry	Chem 111 (1)	General Chemistry	Fall	---
	Chem 231 (½)	Quantitative Chem	Spring	Chem 111 Math 111
	Chem 241 (½)	Descriptive Chem	Spring	Chem 222
1 Year Organic Chemistry	Chem 221 (1)	Organic Chem I	Spring	Chem 111
	Chem 222 (1)	Organic Chem II	Fall	Chem 221
Calculus	Math 111 (1)	Calculus I	Fall, Spring	Placement Exam
Statistics	Math 217 (1)	Introduction to Statistics	Spring	Math 111
1 or 2 Semester(s) English Composition	Eng 101 (1/2-1)	Composition	Fall	Dept. permission
	Eng 201 (1/2)	Composition: The Essay	First half Spring	---
	Eng 410 (1)	Advanced Composition: Acad. and Prof. writing	Spring	Jr. or Sr. or Dept. permission
	Eng 411 (1)	Advanced Composition: Bus. And Tech. Writing	Spring	Jr. or Sr. or Dept. permission

\* There is variation among physician assistant schools with some requiring many more specific courses such as Nutrition, Physics, and Biochemistry so it is very important that you investigate the prerequisites at the physician assistant school of your choice.

\*\* In addition to these required courses almost half of the physician assistant programs require health care experience. This can range from minimal contact to 1 full year of patient care.

Students can learn more about core prerequisite course requirements for each physician assistant program at the American Academy of Physician Assistants (AAPA) web site (<http://www.aapa.org>).

There is a centralized application process for physician assistant programs (CASPA). The standardized test required for entrance into most physician assistant programs is the Graduate Record Examination (GRE) although a few schools do require the Medical College Admissions Test (MCAT).

Typically, a student needs a minimum GPA of 3.0 on a 4.0 scale.

**The Education and the Degree:**

All physician assistants are college graduates. Currently, baccalaureate and master's degree training programs exist in the field. However, the trend is to eliminate baccalaureate degree programs in favor of master's degrees. The average PA curriculum takes approximately 26 months to complete.

All physician assistants are also required to take a national examination and be licensed by the state in which they practice.