

# PREPROFESSIONAL STUDENT HANDBOOK



College of Science - Health Professions Information

**SIU** Southern Illinois  
University  
CARBONDALE

*January 2018*

# PREPROFESSIONAL STUDENT HANDBOOK

College of Science - Health Professions Information  
Southern Illinois University at Carbondale

For links to preprofessional information, schools & application services,  
visit our website at:

[http://www.science.siu.edu/advisement/health\\_advisement/index.html](http://www.science.siu.edu/advisement/health_advisement/index.html)

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## HEALTH PROFESSIONS INFORMATION

### Health Professional Committee:

Dr. Wesley C. Calvert, Mathematics  
Dr. Eric Chitambar, Physics  
Dr. Derek Fisher, Microbiology  
Dr. Michael Hoane, Psychology  
Dr. W. Todd Pierson, (Co-Chair), Physiology  
Dr. Latasha Redmond, Biological Science  
Dr. Zhihua Du, Chemistry  
Dr. Rollin M. Perkins, M.D. FAAFP, FACSM

### Health Professions:

Tammi Pinski, MLS, Health Professions Advisor  
Billie Donas, Office Manager

*The HPIO is Located in the*

### **Science Advisement Office**

Neckers Room A185 (618-536-5537)

**\*To make an appointment or for a list of walk-in hours, please call the above number.**

### Health Professions Online Listserv:

Receive emails about events and application information!

Exchange information with other SIUC Pre-Health students!

To subscribe, send an email to [listserv@listserv.siu.edu](mailto:listserv@listserv.siu.edu). Ignore the subject line. The text should contain the following listserv command: **SUB PREHEALTH-L firstname lastname**. To send an email to the list:

**PREHEALTH-L@siu.edu** (The command to unsubscribe is **UNSUB PREHEALTH-L** (no name is needed).

## INTRODUCTION

If you are planning to apply to one of the following:

CHIROPRACTIC SCHOOL	PHARMACY SCHOOL
DENTAL SCHOOL	PHYSICAL THERAPY SCHOOL
MEDICAL SCHOOL	PHYSICIAN ASSISTANT SCHOOL
OCCUPATIONAL THERAPY SCHOOL	PODIATRY SCHOOL
OPTOMETRY SCHOOL	VETERINARY SCHOOL

**Read this handbook, keep it, and use this information.** This will answer many of your questions about admission requirements, when to do what, and where to find information.

**Also, visit the Health Professions Information Office** (HPIO) in the College of Science Advisement Center if you need to ask other questions. **One of the preferences of any medical school will be a letter of evaluation from the Health Professional Committee.** How the Committee makes that evaluation is outlined in this handbook.

**Evaluations will need to be collected from professors, professional mentors, and employers by February 14, 2018.** Start this process in advance, as students typically interview during the **SPRING OF THEIR JUNIOR YEAR** with this committee.

## **HOW DO YOU KNOW?**

**How do you know you want to be a dentist, physician, optometrist, veterinarian, etc.? Before you make a career decision, ask yourself these important questions:**

### **1. How much do you know about this profession?**

- \*Have you discussed the profession with someone who is currently practicing it?
- \*Have you observed firsthand what a day in the life of the practitioner is like? Have you read anything concerning this profession – in news media, professional journals, books, or articles?
- \*Are you willing to assume a large financial commitment (in most cases)?
- \*What kind of personal life is possible if you are dedicated to this work?
- \*How does this profession fit into our society? What are its responsibilities, problems, and conflicts?
- \*What is the demand for this professional in the current healthcare marketplace?
- \*What are the ethical issues you may have to deal with?

### **2. How much do you know about the educational demands of this profession?**

- \*How long will you be in school? Is there a necessary period of internship or residency after that? What will you be studying? How difficult is it?
- \*How expensive is it?
- \*Do students ever drop out or fail after being accepted? What problems would that cause?
- \*Are you prepared to enter a field where you will have to spend time and effort keeping up with new developments?

### **3. If you have answered all those questions, it is time for these:**

- \*What do you believe is most valuable to you in your life?
- \*Will this profession help you to live by your values?
- \*What are your proven skills? Do you have the ability to learn and practice this profession and to balance it with your personal life?
- \*What kind of person are you? Are you well organized, energetic, interested in a wide variety of activities and issues, oriented toward good relationships with and service toward people? Are you emotionally stable, compassionate and able to handle pressure?
- \*Are you comfortable being in a clinical/hospital setting with patients who are ill, etc.?

# Pre-Health Professions Advising

The College of Science Health Professions Information Office is a special resource for students interested in careers in dentistry, medicine, optometry, pharmacy, physical therapy, physician assistant, podiatry and veterinary medicine; or in various therapy, laboratory or other health careers. Along with offering guidance concerning requirements of and application procedures to the various schools, this office compiles the preprofessional files of students who will be applying to medical (including osteopathic medical), podiatry, optometry and dental school and works with the Health Preprofessional Committee in recommending those applicants.

## Scheduling Appointments

Initially, pre-health profession students will meet with the health professions advisor. After grades have been posted, Pre-Health students must maintain an overall **GPA of 3.0** to make an appointment with a Health Professions Advisor. Appointments must be scheduled by calling the College of Science Advisement Office at 618-536-5537. Do not email your advisor to schedule an appointment. Appointments should be scheduled a minimum of 48 hours in advance. If you need to see an advisor quickly, utilize the walk-in hours. During peak times of the year (i.e. right before registration opens) make appointments several days in advance. If you need to cancel your appointment, call **24 hours in advance**. If you do not show up to your appointment, you will not be able to schedule appointments for the remainder of the semester and will only be able to utilize walk-in hours.

## Communication

Use your SIU email account when communicating with advisors. Include your DAWG tag number in all communications. You should subscribe to the College of Science Advisement and Pre-Health listservs. Important information about classes, new policies, upcoming events and opportunities will be communicated through this way. Send an email to [listserv@listserv.siu.edu](mailto:listserv@listserv.siu.edu). The subject line can be ignored. The text of the note should contain the following command for the Advisement listserv: SUB SCIENCE-NEWS-L firstname lastname or the following command for the Pre-Health listserv: SUB PREHEALTH-L firstname lastname

## Resources

Resources you can utilize to prepare for an advising appointment, to assist you in long-term academic planning, and to gain access to various services available on campus.

Pre-Health Advising: [http://science.siu.edu/advisement/health\\_advisement/index.html](http://science.siu.edu/advisement/health_advisement/index.html)

Pre-Health Information: [http://science.siu.edu/advisement/health\\_advisement/information/index.html](http://science.siu.edu/advisement/health_advisement/information/index.html)

Note: The Request for Evaluation form is on the respective health professions pages.

Pre-Health Professions Association: <http://www.ppa.siu.edu/>

Undergraduate Catalog: <http://registrar.siu.edu/pdf/ugradcatalog1415.pdf>

Registration Calendar: <http://registrar.siu.edu/calendars/registration.html>

Saluki Research Rookies: <http://cssr.siu.edu/>

Saluki Volunteer Corps: <http://www.cslv.siu.edu/students/svc/index.html>

Academic advising requires participation by both the advisor and the student. Active involvement by both parties will ensure students achieve the expected learning outcomes in order to develop a clear educational plan. Advising is used as a means to teach students the necessary components to successfully attain their educational goals while at SIUC. Advising should not be viewed as a one-time encounter, but as an ongoing process that helps the student develop both academically and personally throughout their academic career. Throughout this process, both the student and the advisor will have specific responsibilities.<sup>1</sup>

<sup>1</sup>Adapted from Texas State University –San Marcos' College of Health Professions Academic Advising Syllabus

### **Responsibilities of College of Science Advisor:**

- Maintain a respectful, welcoming, and confidential environment where you can easily discuss your academic, career goals, personal goals, concerns, and questions.
- Listen to and respect your concerns, interests, values, and questions.
- Keep your file up to date and accurate.
- Be knowledgeable in the College of Science degree requirements, university policies and procedures, graduation requirements and resources available to you.
- Refer you to university resources, departments, or materials as needed.
- Have daily office hours to meet with you.
- Provide guidance in your decision-making process, encouragement, and support, realistic decisions and goal making, but also to address unrealistic decisions and goals and discuss alternative possibilities.

### **Additional Responsibilities of a Pre-Health Professions Advisor:**

- Offer information on the requirements, preparation and training needed for various health professions.
- Assist in making an informed choice of a major and career.
- Evaluate your strengths.
- Identify gaps in your preparation.
- Offer guidance concerning requirements of and application procedures to various professional schools.
- Assist in the professional school application process.
- Gain access to more information.
- Connect with community resources, health care professionals and institutions.
- Schedule and attend an academic advisement appointment once a semester.

### **Your Responsibilities as a Pre-Health Professions Student when Meeting with the Health Professions Advisor:**

You are responsible for understanding and completing all requirements necessary for your degree. You are expected to participate in the advisement process in order to have a productive and efficient advising experience.

- Arrive for your scheduled appointment in a timely manner and check in at the front desk or cancel or reschedule your appointment if needed.
- Silence your phone before meeting with the advisor.
- Come prepared to discuss your educational and career goals.
- Bring and keep personal copies of all vital documents applicable to your degree.
- Notify the advisor of any special needs, problems, personal circumstances, or difficulties that could impact your academic performance.
- Be willing to accept and consider advice given in the appointment.
- Take responsibility for your academic progress.
- Choose a primary degree program.
- Explore your chosen profession to verify it thorough shadowing and perhaps participating in the Extern Program or SCI 201, Career Prep Seminar for the Health Professions.
- Get to know your professors so they can write recommendation letters for you.

## **Partnering with your Pre-Health Professions Advisor**

Despite the availability of the health professions advisor, many students do not take advantage of all they offer! **The health professions advisor can help you answer many questions.**

### **Questions about Career**

- ~ Is the career I am considering the best choice for me?
- Have I narrowed my career choices too soon?
- What is the career really like? Am I idealizing it?
- What are the various opportunities in the career? Can one combine practice, research and teaching?
- How do I make time for family? How do I have a personal life outside of my career?
- If I am having trouble with math/science, what other careers where I can help people should I consider?

### **Questions about Preparation**

- ~ What do I need to focus on as I prepare for a career in health care?
- Do I have the intellectual capacity to be successful in professional school and the career that follow?
- What major should I pick? Biology? Chemistry? History? Music?
- What are good volunteer opportunities?
- What are the best ways to use my summers?

### **Questions about the Admission Process**

- ~ How do professional schools select candidates for admission? How do I make myself a strong candidate?
- What are my chances of getting in?
- How important is my GPA? Score on the entrance exam (MCAT, DAT, and GRE)? Personal statement?
- How many schools should I apply to? How do I decide which schools to apply to?
- How am I going to pay for my education?

### **Questions about Training for the Career**

- ~ What is professional school and post-graduate training really like?
- Can I have a personal life as a student and resident?
- When is the best time to think about starting a family?

### **Questions about Not Being Accepted**

- ~ Why wasn't I accepted? Was it my grades? My scores? Something else?
- What can (should) I do next year?
- How can I add to my preparation, improve the quality of my application, and enhance my future chances of acceptance?
- Should I re-evaluate whether I have made the right career choice?

### **For all these questions, a health professions advisor can help!**

Better than the web or an exchange of emails, an engaged, in-depth conversation with an advisor can provide new information and insights, help to validate (or invalidate) prior information and conclusions, and identify knowledge. Like any thorough health professional, a pre-health professions student should never be reluctant to get a second opinion.

# YOUR BASIC FOUR YEAR PLAN\*

**First Year:** Begin preprofessional and university requirements and/or major courses, if known. Join and become an active member of the PPA (Pre-Health Professions Association).

**Second Year:** Continue preprofessional and general education requirements and begin major requirements. Get to know your professors and begin to accumulate your file of preprofessional evaluations - See "Request for Evaluation Form" on the individual health profession pages (medical, dental, optometry, veterinary). Take one to two practice **full-length** MCAT admissions tests to find where your skill level lies.

Pre-med students will be required to take a full-length practice MCAT exam prior to their committee interview. Proof of this practice exam must be submitted with their committee packet. A "complete" packet will include the following items:

- Three to six requests for evaluation and letters of evaluation (LOE). Three is the minimum, however five to six are recommended. Do not submit more than six.
- Biographical data information.
- Personal statement.
- Proof of a completed full-length practice MCAT exam. (This form can be downloaded).
- Color photo, 3 x 6 is recommended.
- Official transcripts from ALL colleges attended, even if just one credit hour has been completed.
- List of pre-professional classes.

**Partial packets will not be accepted.** If a completed packet is not turned into the Health Professions office by February 14, 2018, a committee interview will not be granted to the student until next year's committee interviews.

**Third Year\*\*:** Complete preprofessional course requirements and continue others as time is available. BE READY TO TAKE THE ADMISSIONS TEST AT THE END OF THIS SCHOOL YEAR. See the Health Professions Advisor with questions you may have about test and application procedures.

~Depending on the type of professional school applied to, you will apply to schools either this summer or fall.

**Fourth Year:** Continue application activity and complete graduation requirements.

~Some students will decide to wait to apply until after the end of their fourth year, which means they will have a one year delay time or gap year before starting professional school.

\*See page 18-19 for a sample curriculum and application timeline. Both are based on the pre-medical track but can be altered for specific major or health profession track.

**\*\*See page 17 (That Busy Third Year) for more information.**



# **PLANNING YOUR CURRICULUM**

Pre-medical and Pre-Physician Assistant students **must** obtain a baccalaureate (four-year) degree before entering medical school. **Most** students entering dental, optometry, podiatry, and veterinary schools also have baccalaureate degrees but it is possible to be accepted earlier. **All** must take admissions tests and apply a year before they wish to enter a professional school.

## **CHOOSE ANY MAJOR:**

Choose an undergraduate major your first semester. If you are temporarily listed with only a preprofessional major, the advisor will need to fill out a “Change of Collegiate Unit, Major, Minor, Specialization, and/or Degree” form to specify a degree program in addition to your preprofessional program. The preprofessional program will become a secondary program.

- Preprofessional students will need to meet with their departmental advisor as well as a preprofessional advisor.
- Professional schools do not have a preferred major although there is a basic list of required courses, and you must do well in them. If you major in science, most of the required major courses will coincide with some of the preprofessional school requirements. Medical schools are increasingly recognizing the value of liberal arts education, so majoring in English or Psychology might give you an edge. If you decide on a science major, take as many “extra” literature, humanities, and social science courses as you can. These courses may help you do better on the MCAT, as there is a Social Science section on the test. It is also recommended that students read broadly for the Critical Analysis and Reasoning section.

**CHOOSE A MAJOR IN WHICH YOU ARE MOST INTERESTED.** For various reasons, you may not go to professional school. What would be your next choice? It is always important to have a back-up plan. While you are choosing your major, get acquainted with the **SIUC Undergraduate Catalog**. In it, you will find all of the SIUC majors and minors, along with their requirements. Review the individual college and university requirements, graduation requirements, general rules and regulations. **It is the responsibility of the student to be aware of these rules and requirements and to satisfy them.**

**SEE YOUR ADVISOR EARLY EACH SEMESTER.** Appointments to be advised for the spring semester are given out starting about two weeks after the beginning of the fall semester. Appointments for summer and fall advisement are given out two weeks after the spring semester begins. **BE THERE!** An advisor will help you find your way through your sets of requirements – university, college, major and preprofessional. Advisors know about substitutions that are allowed for some requirements and prerequisites that must be taken before certain courses, whether a particular course is taught every semester, rules about adding and dropping courses, and a long list of general information helpful to you. General College of Science or Departmental Advisors will assist with your degree track advisement. The health professions advisor will help with all the other educational and professional questions.

**WHAT ADVISORS CANNOT DO IS CREATE SPACE FOR YOU IN FILLED COURSES. MAKE AN APPOINTMENT AS EARLY AS POSSIBLE AND KEEP IT!**

## **CHOOSING EXTRA-CURRICULAR ACTIVITIES\***

Choosing extra-curricular activities is a matter of personal preference, free time after giving priority to studies, and whether or not you are employed or have other responsibilities. There is no magical activity that gives you preference in professional school admissions. You will need exposure to the career field you are seeking. Beyond that, schools want to know whether you use your time effectively, whether you relate well to other people, how you handle responsibility, and if you are a well-rounded person. Being an active member of the Pre-Health Professions Association is an important extra-curricular activity. Saluki Volunteer Corps has a comprehensive list of volunteer activities and will document your volunteer hours. Information about how you use your non-academic time and the benefits you derive from extra-curricular activities is important to admission committees when they consider your suitability for their program. Keep a log of your activities (time frame, hours per week) and consider creating a journal of your healthcare experiences.

### **SUGGESTED EXTRA-CURRICULAR ACTIVITIES:**

1. Paid Employment (General or Health-Related)
2. Volunteer/Community Service
3. Investigating health care occupations/Job “shadowing”
4. Campus Activities
5. Family obligations and involvement

**\*Southern Illinois University School of Medicine hand-screens all applications. If your AMCAS form does not list a full complement of extra-curricular activities, SIU will not select you, no matter how high your grades and MCAT scores.**

**THE PRE-HEALTH PROFESSIONS ASSOCIATION** provides speakers from various health fields, trips to professional schools and conferences, application information, social events, study sessions, workshops, and volunteer opportunities. For information regarding meeting times and dates, please visit the website: <http://www.ppa.siu.edu>

# COURSEWORK REQUIREMENTS

## **CHIROPRACTIC\*, DENTISTRY, MEDICINE AND PODIATRY**

SIU School of Medicine does not have “required” coursework, but highly recommends the following coursework. All other medical schools have a required curriculum. For the newly revised MCAT (Spring 2017) it is important to have Biochemistry, Statistics and Social Science.

### **Requirements:**

- ~ English, 1 year (ENGL 101, 102; or 120)
- ~ Algebra-Trigonometry (MATH 108, 109; or 111)
- ~ Chemistry, Inorganic, 1 year with laboratory (CHEM 200, 201, 202 and CHEM 210, 211, 212)
- ~ Chemistry, Organic, 1 year with laboratory, (CHEM 340, 341, and 442, 443)
- ~ A semester of Biological Chemistry (CHEM 350, 351) (dental)

**FOUR Chemistry labs are needed for medical school. Students need to take all chemistry labs OR either the Organic II or Biochemistry Lab.**

- ~ Physics, 1 year with laboratory (PHYS 203A, B and 253A, B; or 205A, B and 255A, B)
- ~ Biological Sciences, 1 year with laboratory required (BIOL 211, 212), 2 years recommended (BIOL 211, 212 and a semester of Cell/Molecular Biology, Physiology and Genetics.)
- ~ Additional social science or humanities courses (SOC 108 and PSYC 102 in the Core Curriculum); U of I Medical School requires three social science courses, two of which must be Psychology. In addition, there is a MCAT Social Science section (2015).

\* Chiropractic schools often allow substitutions --- (see your advisor)

### **Strongly Recommended:**

- ~ Biochemistry (CHEM 350, 351). Biological chemistry is required for some majors, and sometimes may be substituted for the second semester of organic.
- ~ Genetics (BIOL 305), Molecular Biology (MICR 302)
- ~ Logic (PHIL 105)
- ~ Anatomy (PHSL 301)
- ~ Physiology (PHSL 310)
- ~ Statistics (PLB 360, or MATH 282 or QUAN 402)
- ~ Cell Biology (BIOL 306)
- ~ Microbiology (MICR 301)
- ~ Psychology (PSYC 102, 233, 302, 307, 312, 333 and others) (MCAT)
- ~ Career Preparation Seminar for Health Professions (SCI 201)

**Recommended:** (choose those best suited to your schedule and other requirements)

- ~ Developmental Biology (BIOL 409) or Histology (ZOOL 409)
- ~ Additional writing courses (ENGL 290 or 391)
- ~ Computer Science or computer-use courses (CS 200B, 201, or 202)
- ~ Medical Terminology (AH 105)

Premedical and pre-dental students should plan to take their admission test in April or May of their junior year (14-16 months prior to entry date applied for). This will allow time to re-take the exam if necessary.

## OCCUPATIONAL THERAPY

Occupational Therapy programs require a Bachelor's degree and many recommend, but do not require, much science. Therapeutic Recreation, Biological Science, and Psychology are suggested majors.

### **Requirements:**

- ~ Cell & Molecular Biology (BIOL 211) OR Genetics/Animal Biology (ZOOL 118)
- ~General Chemistry I, II & Laboratory Chemistry (CHEM 200, 201, 202, 210, 211, 212) OR CHEM 140 A,B\*
- ~English Composition I & II (ENGL 101, 102)
- ~College Algebra, Trig & Analytic Geometry (MATH 108, 109)
- ~One of: Introductory Biostatistics (PLB 360), QUAN 402, or Intro to Statistics (MATH 282)
- ~College Physics \* & Laboratory (PHYS 203A, 253A)
- ~Human Physiology (PHSL 201 & 208; OR 310)
- ~Human Anatomy (PHSL 301)
- ~Social & Behavior Science (required for most schools): General Psychology (102), Abnormal Psychology (331), Child Psychology (301), Personality (305), Intro to Sociology (108) are recommended. Check with individual programs as to required courses.
- ~Human Growth & development (HED 311)

**\* Only required by some OT programs.**

### **Recommended:**

- ~Medical Terminology (AH 105) – Required by some schools (i.e., SLU)
- ~Adulthood & Aging (PSYC 304)
- ~Elementary Logic (PHIL 105), Developmental Biology (BIOL 309) or Histology (ZOOL 409)

Approximately 40 hours of occupational therapy experience are recommended before applying.

## OPTOMETRY

Optometry coursework is similar to Medicine and Dentistry, except that Calculus, Microbiology and statistics are required.

### **Requirements:**

- ~English, 1 year (ENGL 101, 102)
- ~ Mathematics, algebra-trigonometry (MATH 108, 109 or 111); Calculus with analytical geometry (MATH 150)
- ~ Chemistry, inorganic, 1 year (CHEM 200, 201, 202, 210, 211, & 212)
- ~ Chemistry, organic, 1 semester (CHEM 340, 341); 2<sup>nd</sup> semester organic (CHEM 442\*, 443) or biochemistry (CHEM 350) strongly recommended. \*CHEM 442 is a useful tool to prepare for the OAT, but not required by all Optometry schools.
- ~ Biological sciences, 2 semesters of biology or zoology including 3-4 hours per week of laboratory (plant biology not accepted) such as BIOL 211, 212
- ~ Anatomy (PHSL 301 or ZOOL 418)
- ~ Physiology (PHSL 310)
- ~ Microbiology, 1 semester (MICR 301)
- ~ Physics, 1 year with laboratory (PHYS 203A, 203B and 253A, 253B or PHYS 205A, 205B and 255A, 255B)
- ~ Psychology, 2 semesters (PSYC 102 and 301 or other)
- ~ Statistics, 1 semester (PLB 360 or MATH 282 or QUAN 402)

### **Recommended:**

- ~ Additional biological sciences, genetics (BIOL 305); embryology (ZOOL 300) or developmental biology (BIOL 309); cell biology (BIOL 306); physics (PHYS 328) (light).
- ~ Social sciences (two semesters), humanities (two semesters), foreign language (two semesters), computer science, and business management.

## PHARMACY

Pre-pharmacy students may apply to pharmacy schools after the required courses have been completed. (UIC requires 60 hours). A bachelor's degree is not needed to enter a PharmD program; however, it may make an applicant more competitive. Experience working in both retail and clinical settings is desired.

### **In addition to the basic pre-medical requirements, pre-pharmacy students should take:**

- ~ Intro to Sociology (SOC 108) or Intro to Psychology (PSYC 102)
- ~ Intro to Micro or Macro Economics (ECON 240 or 241)
- ~ Calculus I (MATH 150)
- ~ Survey of the Human Anatomy (PHSL 301)

## PHYSICAL THERAPY\*

Pre-physical therapy students may select a science major or non-science major to apply to doctoral-level PT programs. Exercise Science is an example of a non-science major in which students may gain hands-on experience. If selecting a science major, students need to find observation experiences outside their degree program. Most programs want 60-100 hours of practical experience before application. Physical therapy programs are very competitive. The GRE is required.

### **Requirements:**

- ~ English Composition – 2 semesters
- ~ Biological Sciences – 6-8 semester hours (BIOL 211, 212) (some schools only require 4 hours)
- ~ Chemistry – 2 semesters (CHEM 140A, 140B) OR (CHEM 200, 201, 202 & 210, 211, 212 for science majors)
- ~ Physics – 2 semesters (PHYS 203A/253A, PHYS 203B/253B)
- ~ Anatomy & Physiology – 1 semester of each (PHSL 201/208 or 310; PHSL 301)
- ~ Statistics – 3 semester hours (MATH 282, PLB 360, QUAN 402)
- ~ Math through Calculus (MATH 141 or 150)
- ~ Psychology - minimum of General Psychology (PSYC 102) and Abnormal Psychology (PSYC 311)

### **Strongly Recommended:**

- ~ Courses in Kinesiology, Biomechanics, upper division Psychology and Sociology, advanced anatomy and medical terminology are highly recommended.
- \* **Students need to check the prerequisite course list carefully for the schools to which they wish to apply.**

## PHYSICIAN ASSISTANT

For the SIU Physician Assistant Program, only grades of C or better are accepted, and the overall and prerequisite course GPA must be at least a 3.2. Admission is competitive. Check with the PA program advisor (618-453-8850) if you have further questions about requirements. SIUC gives preference to students with significant health care experience and exceptional academic performance. Prior medical experience is important. As many as 2000 hours of a combination of direct patient experience, including paid employment, volunteer work and shadowing a PA-C are desirable. Many applicants are CNAs, EMTs, medical scribes, respiratory therapists, etc. A Biological Sciences or Physiology major is recommended. Other science or health-related majors are accepted. The GRE or MCAT is required.

### **Requirements:**

- ~ English (ENGL 101)
- ~ Biological Sciences (ZOOL 118 or BIOL 211 for science majors)
- ~ Physiology\* (PHSL 310 or higher)
- ~ Cadaver Anatomy\* (PHSL 301)
- ~ Microbiology (MICR 201 or 301)
- ~ Chemistry (CHEM 140a, 140b or 200, 201, 202 and CHEM 210, 211, 212) (CHEM 340/341, 442/443 and/or 350/351 are required by some schools)

- ~ Mathematics\* – Stats with probability (EPSY 402, MATH 282 or PLB 360)
- ~ Psychology – General (PSYC 102) or Developmental (PSYC 301, 303 or 304)
- ~ Sociology (SOC 108)
- ~ Medical Terminology (AH 105)
- ~ Cardiac Life Support or CPR for providers (HED 334 with a grade of B or higher)
- \* **Must be completed within the last 5 years**



Admission is competitive and is usually granted to the best-prepared students. Most first-year veterinary students have four or more years of pre-veterinary education. Depth and breadth of experience working with animals and preferably, working for a veterinarian, is essential. The University of Illinois requires a letter of recommendation from a veterinarian. Most students desiring to work with small animals major in Zoology with pre-veterinarian specialization.

**In addition to basic pre-medical requirements, pre-veterinary students should take:**

- ~ Organic I (CHEM 340) and lab (CHEM 341)
  - ~ Biochemistry (CHEM 350) and lab (CHEM 351)
  - ~ Animal Science and/or Nutrition (ANS 121, 122 and/or 215)
- (Please See the Zoology/Pre-Vet curriculum)

**More information concerning specific professional schools is available in the HPIO.  
Consult your pre-health advisor for more detailed information.**

## **PREPROFESSIONAL EVALUATIONS/ HEALTH PREPROFESSIONAL COMMITTEE**

If you are applying to **medical** (including osteopathic medical) schools, you will want an evaluation from the Health Preprofessional Committee. Most **dental, optometry, podiatry, and veterinary** schools recognize a Committee letter from a faculty board that is familiar with preprofessional students. The College of Science has a faculty committee who will evaluate you in three areas: academics, personal attributes, and time/organizational management. A Health Professions Advisor prepares an in-depth, thorough letter addressing these areas that will be submitted with your separate letters. Committee letters are based on individual evaluations, autobiographical material, your academic record, and a half-hour interview.

“Request for Evaluation” forms are online. Request evaluations from the following individuals: (1) a biological sciences faculty member; (2) a chemistry, math, or physics faculty member; and (3) a non-science college faculty member. Additional evaluations may be from faculty, teaching assistants, employers, volunteer service supervisors, or physicians you have shadowed. **To emphasize:** there must be three from college teachers of faculty rank (two must be from SIUC in case you have

transferred from another college) and they must have taught you in a class where you could be compared with other students.

The better the evaluator knows you, the more helpful your evaluation will be. Make an appointment to talk with your teacher about yourself or your plans. Most teachers have some routine of their own to handle the writing of evaluations. Ask whether they are willing to do this for you and be guided by their response.

Evaluations from your family doctor, Congressman or banker are not appropriate. Evaluations from persons who are in a position to comment on your abilities to learn, to perform responsibly, to handle pressure, to be well organized and productive are the most helpful.

**Note:** Having five to six evaluations in your file is better than having the minimum of three. Provide your evaluators with plenty of time to complete evaluations, and also give them the **February 14, 2018** deadline.

## **STUDENTS' RIGHTS CONCERNING PREPROFESSIONAL EVALUATIONS**

The Family Educational Rights and Privacy Act of 1974, (FERPA) as amended, gives you the right to review and challenge the accuracy of any records that concern you as an individual that are kept on file by an educational institution where you are enrolled. Letters of recommendation kept on file on our campus (SIUC) are included in this law.

The amended law also permits you to waive your rights of access to these files. The Health Preprofessional Committee will perform the same service on your behalf whether you do or do not waive your rights. The reason for giving you the option of waiving your rights is that professional schools want to see frank and honest evaluations, and they may put more trust in confidential evaluations (those they know you have not seen).

All evaluation forms from this office have an attached cover page on which you must (1) identify the person you are asking, and request her or him to complete the evaluation form; and (2) choose to waive or not waive your rights to see it after the evaluator has submitted it. The evaluator knows while writing it whether it will be kept confidential, and we know when it reaches the HPIO whether or not the letter can be read by you.

A similar request must be made to the Committee before we upload your evaluation. The professional schools receiving it will be informed that you did or did not waive your rights to examine the file before the evaluations were written.



## THAT BUSY THIRD YEAR

If you are completing your curriculum on a typical four-year schedule, the timetable for your junior year is as follows:

**FALL:** Pick up packet checklist from College of Science Advisement Office by **December 22nd, 2017**. Finish collecting evaluations and Letters of Evaluation from evaluators. **Pre-med students** should register online for the Spring MCAT (seats fill quickly). **Pre-pharmacy students** should take the September PCAT (if not taken earlier).

**FEBRUARY:** Complete your preprofessional file in the HPIO and schedule your committee interview. The Health Preprofessional Committee interviews students in February, March and April. In order for your compilation to be completed prior to your interview, a completed committee packet will be due no later than **February 14<sup>th</sup>, 2018**.

**MARCH:** Investigate specific schools more thoroughly. Information is available in the HPIO and you may have collected additional information yourself. Pre-dental and pre-optometry students should register for the DAT or OAT.

**APRIL/MAY:** Take DAT, OAT or MCAT. Scores will be available immediately for the DAT, four weeks after testing for the MCAT and OAT. The PA Program application process begins (CASPA available).

**MAY:** Before the end of spring semester, make an appointment to talk to your advisor about which schools to apply. Attend the AMCAS workshop. For other schools, find out more about the application process through your advisor or online.

~ **The GRE** should be taken for Veterinary, OT, PT or PA schools in the spring or summer. (Register in advance online.)

~ If you are leaving campus for the summer, **pick up a copy of your transcript or request one sent to yourself after spring grades are posted.**

1) You will need to complete information from your transcript in order to fill out application blanks;

2) If there are any errors\* on your transcript, you will know and have the opportunity to have it corrected before it is sent to schools. *\*Although that type of error rarely occurs, when it does it can cause a great deal of difficulty. Centralized Application Services have a transcript matching form, which will need to be delivered to or mailed to the Transcripts office.*

**JUNE:** Submit your application. Early applicants do have an advantage (provided you took the spring admissions test and made competitive scores). **Keep records** of everything you have completed and when you completed it.

**AUGUST/SEPTEMBER:** Re-take the MCAT if needed. It is not recommended that you take the MCAT in August for the first time. **Pre-Veterinary Students:** The GRE must be taken between October 1<sup>st</sup> and September 30<sup>th</sup> in the time period you are applying. All GRE scores must be sent directly to each institution to which you apply.

## SAMPLE CURRICULUM

This is a sample curriculum which includes courses required (and some of those recommended) for Preprofessional students, plus courses to fulfill University requirements. **Use this with modification based on your particular requirements and on the advice of your academic advisor.**

<b><u>First Year</u></b>		<b><u>Fall</u></b>	<b><u>Spring</u></b>
BIOL 211	Introductory Cell Biology & Genetics		4
BIOL 212	Introductory Evaluation & Ecology		4
CHEM 200, 201, 202	Introduction to Chemical Principles, General Chemistry Lab I, and workshop	5	
CHEM 210, 211, 212	General and Inorganic Chemistry, General Chemistry Lab II, and workshop		5
UCOL 101U	Foundations of Inquiry	1	
<i>MATH 108, 109</i>	<i>College Algebra plus Trigonometry and Analytic Geometry</i>	3	3
<i>ENGL 101, ENGL 102</i>	<i>English Composition I, English Composition II</i>	3	3
		16	15
<b><u>Second Year</u></b>		<b><u>Fall</u></b>	<b><u>Spring</u></b>
CHEM 340, 341	Organic Chemistry I, Organic Chemistry Laboratory I	5	
CHEM 442, (443)	Organic Chemistry II, Organic Chemistry Laboratory II*		3, (2)
<i>PHYS 203A, 253A</i>	<i>College Physics I and College Physics Laboratory I</i>	4	
<i>PHYS 203B, 253B</i>	<i>College Physics II and College Physics Laboratory II</i>		4
PHSL 301	Survey of Human Anatomy		4
<i>BIOL 306</i>	<i>Cell Biology</i>	3	
<i>SOC 108</i>	<i>Introduction to Sociology</i>		3
<i>PSYC 102</i>	<i>Introduction to Psychology</i>	3	
		15	15-17
<b><u>Third Year</u></b>		<b><u>Fall</u></b>	<b><u>Spring</u></b>
CHEM 350, (CHEM 351)	Introduction to Biological Chemistry; Biochemistry Lab**		3, (2)
PLB 360	Introductory Biostatistics		3
PHSL 310	Principles of Physiology	5	
ENGL 290 or 391	Intermediate Expository Writing or Precision in Reading & Writing	3	
MICR 301	Principles of Microbiology	4	
<i>BIOL 305</i>	<i>Genetics - Classical and Molecular</i>		3
<i>PHIL 105</i>	<i>Elementary Logic</i>		3
PSYC 302/402	Introduction to Neuroscience OR Psychology of Medicine	3	
SCI 201	Career Preparation Seminar for Health Professions	1	
		16	12-14
<b><u>Fourth Year</u></b>		<b><u>Fall</u></b>	<b><u>Spring</u></b>
<i>Select</i>	<i>Fine Arts</i>		3
<i>Select</i>	<i>Humanities</i>	3	
<i>Select</i>	<i>Supportive Skills</i>		3
<i>CMST 101</i>	<i>Introduction to Oral Communication</i>	3	
<i>Select</i>	<i>Undergrad Research/Senior Seminar</i>	2	1
Major courses	Science electives to complete the student's major requirements	6	6
		14	13

**To offset heavier loads, students may want to consider summer classes (*italics*).** Students may begin at higher or lower level mathematics courses. An academic advisor will guide you, based on your records. Statistics is required for pre-optometry and pre-physician assistant students, and is also incorporated in the MCAT. For the MCAT's **social science section**, upper level psychology (i.e. Psychology 302, 402, etc.) is recommended. \*Four chemistry labs are required for medical school; students can choose accordingly. \*\* Biochemistry lab is not required for dental school; Organic I and II labs are required. In general, online coursework for professional school is not recommended.

## TIME CHART FOR APPLYING TO MEDICAL SCHOOL

1. <b>Evaluation Requests</b>	Sophomore and Junior years (need at least 2 upper-level science classes, 1 biological science & 1 physical science)
2. <b>Interview with the Health Professional Committee – College of Science</b>	Spring of the year you apply (usually Junior year) in Feb., March or April
3. <b>Medical College Admission Test (MCAT) – <a href="http://aamc.org/mcat">aamc.org/mcat</a></b>	Preferably, April or May of Junior year – may retake in July or August. (Scores received one month from test date)
4. <b>AMCAS Application (Central Application for most U.S. medical schools) – <a href="http://www.aamc.org/students/applying/amcas">http://www.aamc.org/students/applying/amcas</a></b>	May of Junior year – application and worksheet available online. Early June (earliest date to submit*). Deadline to apply to most schools is Nov. 15 <sup>th</sup>
5. <b>Supplementary or Secondary Application received (if application made in early June)</b>	August
6. <b>Committee Letter sent to schools</b>	At the time supplementary applications are received
7. <b>Interviews</b>	Early Fall – Winter (Late January – RMED)
8. <b>Acceptance received</b>	Fall or Spring of Senior year, earliest is typically November

Admission Officers and the Health Profession Advisor strongly advise taking the MCAT in the spring. The test may be retaken in the late summer if your scores are not competitive (please talk with your advisor if you are unsure). Taking the MCAT for the first time in August means that schools do not receive your scores until September, which makes you a later applicant. Also, students may take the MCAT three times per year, but two tests per year are more realistic.

***\*Students are STRONGLY ENCOURAGED to apply to several schools early, BY EARLY JUNE if possible (earliest dates vary year by year). MCAT scores should be available before or about that time if the test is taken in April/May. Applications should be ready to send no later than the test score receipt date. Early applicants usually receive top consideration.***

***\*\*SIU School of Medicine has a batched admission process, reviewing applications at three different points throughout the year – usually November, January and late February/early March. However, the highest numbers of students are accepted in the first batch.***

# ADMISSIONS TESTS

Plan to take the appropriate admissions test in the spring of your junior year (or a year and a summer before you hope to enter the professional school). This gives you the advantage of becoming an early applicant, or, if necessary, of having a second chance to take the test.

The **Medical College Admissions Test (MCAT)**, given several times throughout the year at a Prometric Center, is required by schools of:

**Allopathic medicine (M.D.)**

**Osteopathic medicine (D.O.)**

**Podiatric medicine (D.P.M.)**

**Physician assistant (P.A.)** (select schools accept MCAT scores; most want the GRE)

## MCAT 2017

The MCAT contains these four test sections:

1. **Biological and Biochemical foundations of living systems.**  
This section tests your knowledge of foundational biological and chemical concepts in relation to scientific inquiry, reasoning, and research and statistics skills to solve problems.
2. **Chemical and Physical foundations of biological systems.**  
This section tests your knowledge of foundational chemical and physical concepts in relation to scientific inquiry, reasoning, and research and statistics skills to solve problems.
3. **Psychological, Social and Biological foundations of behavior.**  
This section assesses your knowledge and use of the concepts in psychology, sociology, biology, research methods, and statistics that provide a solid foundation for learning in medical school about the behavioral and socio-cultural determinants of health.
4. **Critical Analysis and reasoning skills.**  
This section tests your reasoning skills. You must critically analyze reading passages based on social sciences and humanities disciplines, and ethics and philosophy, cross-cultural studies, population health.

**A recommended beginning guide:  
The Official Guide to the MCAT Exam**  
AAMC.org  
(\$30.00 fee)

The **Dental Admission Test (DAT)** is given at a Prometric testing center on computer. Students must first apply through the Dental Admissions Testing Program. There are separately scored sections on quantitative skills (arithmetic and algebra), reading comprehension, biology, natural sciences, inorganic chemistry, organic chemistry; and one combined score on items in the Perceptual Ability Test: form development, apertures, angles, cubes, and orthographic projections. There is no physics on the DAT. DAT scores are scaled from 1 to 30. A standard score of 17 indicates average performance; a score of 19 (and higher) is more competitive.

The **Optometry Admission Prometric Test (OAT)** is also computer-based. Like the DAT, it is given at a Prometric testing center. The test includes subtests in reading comprehension, quantitative ability, biology, chemistry (inorganic and organic), and physics. Scores range from 200 to 400, with 300 set as the mean score (46-55 percentile) of all participants.

The **Pharmacy College Admission Test (PCAT)** is given at Pearson Professional Center in Marion. It is computer based, and is offered in January, July, September and October. This test includes verbal, quantitative math, biology, general chemistry, elementary organic chemistry, and reading comprehension.

The **Graduate Record Examination (GRE)** is computer-based and can be taken at the Prometric Testing Center. It is required for Veterinary, Occupational Therapy, Physician Assistant and Physical Therapy Schools. The General Test measures critical thinking, analytical writing, verbal reasoning, and quantitative reasoning skills that have been acquired over a long period of time.

### **WHERE DO I TAKE THE TESTS? HOW DO I PREPARE?**

Registration is available online for admission tests with deadlines approximately one month in advance of the test date. (\*For the spring MCAT, registration opens the fall before. The MCAT has a second "late-registration" deadline. You may take the test in any of the cities where it is offered. Although the MCAT will be offered 20 times via computer testing, it is only offered on certain dates and seating is limited.) You are encouraged to take your admission test in late spring, which will leave time to repeat the test late summer if necessary.

**SCI 201, HP Career Prep Seminar**, has two admission test workshops. Pre-Health Professions Association-organized study groups can be very helpful in preparing for all standardized tests.

**Review** for your test **at least 3-4 months** in advance. Ask your health professions advisor about recommended study guides. ***Do not underestimate the importance or the difficulty of doing well.*** Commercial preparation courses are very expensive. Your best preparation is your own college course work: keep papers, books, and outlines from the relevant courses, and ideally, study for your admission test as you go through your classes. Take a practice test early on to determine your weaknesses, and plan to take several more practice tests-full length if possible. Structure your time to study consistently over a period of months-your investment will pay off!

## **APPLICATIONS TO PROFESSIONAL SCHOOLS**

Applications are expensive. Application fees and travel expenses for interviews, if you are seriously considered, can easily add up to hundreds of dollars. Spend your time (answering supplemental applications while carrying your senior course load can get to be a chore) and your money on schools where you are competitive, eligible, and truly interested.

Information about professional schools is available in the HPIO. Talking to students who are enrolled there is a good source. Visit the school if possible, but do not expect them to have time to show you around if you go during their applicant-interview season or without an appointment. The best time for visits is late spring or summer. Call first!

First of all, know specific requirements and residency restrictions. This information is available annually in the Medical School Admission Requirements, Osteopathic Medical College Information Book, Admissions Requirements of U.S. and Canadian Dental Schools, and Information for Applicants to Schools and Colleges of Optometry manuals, etc. Some of these manuals are also available in the HPIO and updated annually, and most are also online.

There are two standard guides for medical and dental schools available online:

- 1) Medical School Admissions Requirements, Association of American Medical Colleges (\$25.00 online) <https://www.aamc.org/students/applying/requirements/MSAR>)
- 2) Official Guide to Dental Schools, American Dental Education Association - <http://www.adea.org/publications/pages/officialguide.aspx> \$35.00 (print) \$15.00 (online)

These resources are also available in the HPIO Office. **For other professional schools/ resources, check links on the HPIO Webpage:** [http://www.science.siu.edu/advisement/health\\_advisement/index](http://www.science.siu.edu/advisement/health_advisement/index)

The centralized application services are the following:

- ~ American Medical College Application Service (AMCAS) [www.aamc.org](http://www.aamc.org)
- ~ American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS) [www.aacom.org](http://www.aacom.org)
- ~ American Association of Dental Schools Application Service (AADSAS) [www.adea.org](http://www.adea.org)
- ~ American Association of Colleges of Podiatric Medicine Application Service (AACPMAS) [www.aacpm.org](http://www.aacpm.org)
- ~ Veterinary Medical Colleges Application Service (VMCAS) [www.aavmc.org](http://www.aavmc.org)
- ~ Pharmacy College Application Service (PHARMCAS) [www.pharmacas.org](http://www.pharmacas.org)
- ~ Central Application Service for Physician Assistants (CASPA) <https://portal.caspaonline.org>
- ~ Physical Therapy Centralized Application Service (PTCAS) [www.ptcas.org](http://www.ptcas.org)
- ~ Optometry Centralized Application Service (OptomCAS) [www.optomcas.org](http://www.optomcas.org)

You must apply to University of Illinois College of Veterinary Medicine through VMCAS (VMCAS will also allow you to apply to 24 of 27 schools in the U.S.).

When the central application service receives your completed application and your official transcript(s) from **each college** that you have attended, the service validates your application, and sends it to as many schools as you have chosen.

The fee depends on the number of schools to which you are applying. Individual schools will acknowledge receiving your information. Some will screen your original application before asking for more material. Others do not screen and will immediately send a supplemental application to all applicants. At this time, schools may ask for an additional fee and essays about why you would be a good fit for their school.

Transcripts must be furnished by the records office of each college or university you have attended—even if it was a one-hour course you took in summer while in high school. Transcripts are only official if they are mailed directly from the college to the application office and are embossed with the school seal. Most colleges will not release your transcript without a signed request from you. **Many application services have transcript “matching” forms.** Use this form with your transcript request.

**APPLY EARLY!** Do not wait for deadlines. An early application is a stronger application. Even though some schools will not consider your application until they have scores from your Admissions Test, it is very important that you apply early. The central application service will take several weeks to process your application before

sending it out to the professional schools. Take the test in the spring and take it seriously. Application season begins in June for dental and medical schools.

~\*\*~ NOTE ~\*\*~

If your first set of scores are fairly competitive, it is recommended that you apply, retaking the test, if needed, to boost your scores. If your scores are very low, you should wait to apply until you have scores that are more competitive.

## **SENDING YOUR COMMITTEE LETTER, INTERVIEWS, ETC.**

Keep a record of information submitted. Read each piece of correspondence as it arrives and follow up as directed.

### **How to submit your evaluations or a committee letter:**

Your Committee letter and/or individual letters with evaluations are uploaded to the particular online application service you are using. Your Committee letter summary of recommendations, checklist portion of the evaluation and individual letters are made into a PDF file which is uploaded to the Central Application Service. The Professional schools then download the PDF's and save them to their admissions office system. (Please see your advisor for more information.)

Interviews are the next step if the school is seriously considering you. These are arranged at the school's request, not the applicant's. The HPIO has information to prepare you for an interview.

Caution: On your application, you will have indicated courses to be completed in the year between applying and entering professional school. If you change your plans, notify the schools (individually). If admitted, your admission is conditional on your completing the curriculum indicated and maintaining your grade point average at the level at which you applied.

Letters of admission may come any time from November until beginning of the next school year. Most students will know of their acceptance by April.

## **IF NOT ACCEPTED, THEN WHAT?**

Perhaps you will apply again. If you know where the weak points of your application were, and you are able to strengthen them, this may be appropriate. If you are unsure of your weak points, consult with your advisor or the program to which you applied. Often students need more healthcare experience and/or to raise their GPA and test scores before re-applying.

Try to be realistic about your chances of being accepted at a later time and be very realistic about your own motivation. Are you just in the habit of thinking about one career without having considered others?

If you plan to re-apply, you must have obvious changes in your application. It is recommended that you have at least 1-2 current evaluations. The same committee letter can be used with a new letter(s) attached.

Other options include graduate school or employment related to your major - another option may be some other health field. Investigate and talk to people in the field or fields you are considering.

Make use of the information available from the HPIO, other advisors, the library, University Career Services, and the Internet.

Your pre-health advisor will be happy to consult with you at any point in the admissions process.