Welcome to Prehealth at Smith College!

We are so pleased to welcome to you campus, and pleased that you have reached out to the Board of Prehealth Advisers as you explore your options in the health professions. Key points for the start of the academic year can be found in this handout, but for additional information, we invite you to make use of the following resources:

**Our website!** [http://www.smith.edu/prehealth](http://www.smith.edu/prehealth)
Here you can find resources for connecting with prehealth advisers and peers, planning courses, getting involved in research, and general exploration of the health professions. Please visit us!

**Board of Prehealth Advisers**
The Board of Prehealth Advisers provides advice to help you explore your career interests and, if you choose, prepare for an application to professional school. We can advise on course selection, balancing academic and extracurricular work, developing a timetable to achieve your goals, and—when the time comes—we guide you through the application process. All members of the Board are pleased to talk with you. All conversations are confidential. Our contact information is available on our website: [http://www.smith.edu/prehealth/advisers.php](http://www.smith.edu/prehealth/advisers.php)

**Health & STEM Professions Lunchbag Series**
Lunchbags are held most Fridays, and we urge you to attend. Effective health care delivery requires teamwork among different professionals, so it is useful to know how other professions intersect with the one you hope to pursue. Additionally, in order to explain to professional schools why you want to attend, it is important to understand the distinctions between your chosen profession and other careers. If you are still exploring your path, lunchbags can help. Topics are listed on our website: [http://www.smith.edu/prehealth/events_lunchbags.php](http://www.smith.edu/prehealth/events_lunchbags.php)

**Prehealth Mailing List**
Our mailing list is most active during the academic year. We share information about events as well as online happenings (presentations, virtual fairs, etc.) Occasionally student organizations share information. We invite you to subscribe: [http://div3lists.smith.edu/mailman/listinfo/prehealth](http://div3lists.smith.edu/mailman/listinfo/prehealth).

**To Schedule an Appointment**
For appointment information and to sign up, visit the Contact Us page of our website: [http://www.smith.edu/prehealth/contact.php](http://www.smith.edu/prehealth/contact.php). You may also always email prehealth@smith.edu and your question will either be answered by a peer adviser or directed to the most appropriate faculty/staff adviser.
Common Smith College prehealth courses

Note: No health profession school requires all of these courses, nor do prerequisite courses have to be selected from this list exclusively. This is simply a list of the Smith courses most commonly chosen from for fulfillment of prehealth requirements. To plan your individualized academic course of study, work with your Liberal Arts Adviser and a prehealth adviser.

**Biology Courses**
BIO 132/133 Cells, Physiology, and Development  
BIO 200/201 Animal Physiology  
BIO 202/203 Cell Biology  
BIO 204/205 Microbiology  
BIO 230/231 Genomes & Genetic Analysis

**Chemistry Courses**
CHM 111 Chem I: General Chemistry  
CHM 222 Chem II: Organic Chemistry  
CHM 223 Chem III: Organic Chemistry  
CHM 224 Chem IV: Introduction to Inorganic and Physical Chemistry  
CHM 118 Advanced General Chemistry*

*If you will take CHM 118 and intend to apply to a health profession school that requires more than one semester of general chemistry, please speak with a prehealth adviser about options.

**Biochemistry Courses**
BCH 252: Biochemistry I: Biochemical Structure and Function  
(Prerequisites are BIO 202 and CHM 223)

**Physics Courses**
PHY 117 General Physics I  
PHY 118 General Physics II

**Mathematics & Statistics Courses**
MTH 111 Calculus 1  
MTH 201 Statistical Methods for Undergraduate Research

**Psychology Courses**
PSY 100 Introduction to Psychology  
PSY 264 Lifespan Development

**Sociology Courses**
SOC 101 Introduction to Sociology

**Exercise and Sport Studies Courses**
ESS 250 Nutrition and Health
Common Questions about Course Requirements

**Where do I start?** If you are still unsure of your plans – academic, career or otherwise – but wish to begin taking courses that will prepare you to enter a health profession school, you may wish to start with CHM 111/118 or BIO 132. These are foundational to almost every health profession and are prerequisites to other courses you may take at Smith. However, we recommend discussing your course plans with your adviser, as a different course may be the right starting point for you.

**Will Advanced Placement courses count for prehealth requirements?** If you have AP or IB credits in Biology, Chemistry, or English, you should substitute higher-level courses. A score of 4 or 5 on the Calculus BC exam generally counts as one year of college calculus. Physics AP is accepted at some, but not all schools.

**Do some schools explicitly require calculus?** Schools of human medicine, dentistry, optometry, pharmacy, and veterinary medicine may require a semester of calculus. Many schools require or strongly recommend statistics.

**Is it true that some health profession schools require biochemistry?** Yes. All veterinary schools require a semester of biochemistry with lab. Some medical schools also require or “highly recommend” the course. Most medical schools do not require biochemistry lab, though some do. Some Canadian medical schools require a full year of biochemistry with lab. Biochemistry topics are on the MCAT (medical college admission test), so all pre-med students are advised to take this course.

**What is different about Smith’s chemistry sequence?** In Smith’s 2-year chemistry sequence the first and fourth semesters make up “general” or “inorganic” chemistry, and organic chemistry is taken in semesters 2 & 3. It is to a student’s advantage to take all four semesters in sequence. Therefore, although you may not stick to the plan you make right now, it is still useful to think – in general terms – of your 4-year timetable and how you will fit in the four semesters of chemistry.

**What should I know about physics?** Unless a student arrives with an unusually strong preparation in physics, she should start with PHY 117: Physics I. This course is offered fall and spring, but first-year students are given first priority in enrollment in the spring. Physics I and Physics II (PHY 118) both require one semester of college-level calculus (MTH 111) or the equivalent as a prerequisite. In both courses, the lecture and lab components are fused into a single, interactive course.

**What about psychology and social science courses?** Most nursing, occupational therapy, physician assistant and physical therapy schools require psychology and/or courses in the social sciences. Dental and veterinary schools generally do not. Although most medical schools do not require these courses, the MCAT includes a social and behavioral science section. Students wishing to prepare for this test by taking courses at Smith may wish to consider PSY 100 and potentially SOC 101. **If you are seeking psychology and sociology courses for MCAT preparation only**, it may be acceptable to take relevant courses virtually anywhere (e.g. abroad, during the summers, online, at community colleges, etc.), in addition to preparing through self-study. Discuss your options with a prehealth adviser.

Updated: August 2016
Would any course with a lot of reading/writing fulfill the English requirement? No. Any course with an ENG, CLT or LIT prefix is acceptable to schools that explicitly require an English course. The course must be taught in English. A first-year seminar that fulfills Smith’s Writing Intensive requirement may be acceptable. Discuss your choices with a prehealth adviser.

In what order should I take the required courses? This depends, in part, on what major you are considering. For example, a prospective biology or biochemistry major could take chemistry in the fall and biology in either the spring or fall; a prospective neuroscience major could take PSY 130 (Clinical Neuroscience) and chemistry in the fall; a prospective physics major could take general physics and calculus in the fall. Balance the lab courses with English and other courses depending on your major requirements and other course commitments. A student who intends to study abroad might take language courses into consideration. Someone majoring outside the sciences can complete the courses in any order, apart from prerequisite restrictions. Make sure that you discuss your interests with your Liberal Arts Adviser and a prehealth adviser before designing a 4-year plan!

How many science and math courses should I take in my first semester at Smith? This is a common question, best answered by the individual student in consultation with her LAA and prehealth adviser. Keeping in mind the goals of doing well and exploring new opportunities both inside and outside of the classroom, most students find it sufficient to take no more than two math or science courses in their first semester, and no more than one course with a lab. If you are unsure of your secondary school preparation in science, you may wish to take fewer science courses in your first year to make sure you do well in them. This is critical! To ensure success in your academic work, plan a program that is challenging but not overwhelming.

What timetable should I follow? This depends in part on your chosen profession.

Students headed for some professions – such as nurse practitioner, physical or occupational therapist, optometrist, and pharmacist – may find that entering professional school directly after graduation fits well. If this is your plan, you would complete most or all prerequisite courses by the end of your junior year, perhaps use the summer before your senior year to study for and take your entrance exam, and submit your applications just before, or in the early part of, your senior year.

However, for other professional schools – such as those for human and veterinary medicine and dentistry, and sometimes public health and physician assistant – we find that most students enter professional school 1-2 years after graduating from Smith. These professions expect successful completion of many prerequisite courses along with significant related experience, and most Smith applicants are best prepared to apply after they have graduated. Health profession schools do not discriminate against applicants who choose to begin professional school one or more years after graduating from college. Many schools place a high value on the experiences applicants gain between undergraduate graduation and professional school application. The Prehealth Board’s resources and advising supports are identical, whether you apply while a student or shortly after graduation.

Because of there is great variety in individual interests and goals, we strongly recommend you discuss your timetable with an adviser.

Updated: August 2016