

UR PRE-HEALTH ADVISING NOTES

Planning the First Semester Schedule

1. Pre-health students should take CHEM 141 in their first semester, regardless of their intended major, unless they will be entering either the IQS or SMART course sequence.
2. Students considering a Biology or Biochemistry & Molecular Biology (BMB) major are encouraged to also take BIOL 199 in their first semester, unless they will be entering either the IQS or SMART course sequence.
3. Students considering a Physics major, are encouraged to also take PHYS 131-132 in their first year, unless they will be entering the IQS course sequence.
4. For those students who have a weak background in math or who did not take calculus in high school, taking two science courses plus calculus can be particularly rigorous. Such students should consider postponing calculus until their second or third semester.
5. AP/IB science credit

Chemistry: Many health professional schools do not accept AP/IB credit for general chemistry unless more advanced coursework is taken in chemistry. For this reason, it is generally advisable for a student to not use AP/IB credit for general chemistry (i.e., CHEM 141) unless s/he intends to major or minor in Chemistry or major in BMB.

Biology: AP credit for Biology is applicable only to BIOL 120 (Modern Concepts in Biology), which is an FSNB course that does not satisfy health professional school admission requirements.

Physics: Most health professional schools accept AP/IB credit for physics.

Beyond the First Semester

1. Calculus
 - Most health professional schools do not require calculus. However, MATH 211 or 190 is required for PHYS 131 and MATH 212 is required for PHYS 132.
2. Taking more than two lab-associated science courses in any given semester is not recommended.
3. Non-science majors are strongly encouraged to take at least one upper-division science course prior to applying to health professional school.
4. We offer an in-house MCAT preparatory course that is taught in spring semesters only.
5. Study Abroad
 - With the exception of the UR / Univ. of St. Andrews partnership program, pre-health students should not take professional school science requirements abroad.
 - A list of pre-health oriented study abroad programs is available at <http://prehealth.richmond.edu/advising/study-abroad.html>

What's New?

1. Biology curriculum (AY 2014-2015)
 - For returning students
 - i. BIOL 201 (Genetics) will not be offered beyond Fall 2014.
 - ii. BIOL 205 (Cell Biology) and 217 (Integrative Physiology) will not be offered beyond Spring 2015.
 - For class of 2018 and beyond
 - i. BIOL 199 (or its equivalent) is required; no exceptions
 - ii. Core classes must be taken in the following sequence: 199, 200, 202
 - iii. Pre-medical and pre-dental students are encouraged to take BIOL 202 (Integrated Biological Principles II)
2. MCAT 2015
 - New section on social and behavioral sciences
 - Incorporation of experimental design and statistics
 - Adds the following courses
 - Introduction to Psychological Science (PSYC 100)
 - Foundations of Society: Introduction to Sociological Analysis (SOC 101)
 - Biochemistry (CHEM 326/7)
 - Statistics for Social and Life Sciences (MATH 119)
3. Human Anatomy with Lab
 - Will be offered in spring 2015 through SPCS
 - Registration preference given to pre-allied health students
4. Clinical Externships
 - Brendan Halligan (CDC) now oversees the health preceptorship program.
 - Eligibility requirements: 1. Pre-medical or pre-dental student, 2. Sophomore standing or above, 3. Minimum GPA of 3.4 for pre-medical or 3.2 for pre-dental.
5. UR / Univ. of St. Andrews Partnership
 - Students may take equivalents of CHEM 205 (Organic Chemistry I) and BIOL 206 (Cell Structure and Function) at Univ. of St. Andrews and receive a letter grade on their Richmond transcripts for these courses.
6. Noteworthy facts
 - The U.S. will face a shortage of approximately 100,000 physicians within the next decade.
 - Applications to medical school are at a record high.
 - Taking a gap year (or more) has become increasingly popular for pre-medical students.
 - Interest in pre-allied health fields is on the rise among our students.

2014 Richmond Pre-health Curriculum Guide

Track	Common Professional School Requirements* (UR equivalent given parenthetically)	Additional Recommended Courses for Professional School Entrance Exams
Pre-medical	General Biology (BIOL 199 or 190 or 192, and 200) General Chemistry (CHEM 141, 317) Organic Chemistry (CHEM 205-206) Physics (PHYS 131 plus either 132, 133, or 134) Biochemistry (CHEM 326 or 327) Psychology (PSYC 100) Sociology (SOC 101) Statistics (MATH 119, BIOL 320, PSYC 200, or SOC 211)	Third general biology course (BIOL 202) Elementary Symbolic Logic (PHIL 251)
Pre-dental and Pre-veterinary	General Biology (BIOL 199 or 190 or 192, and 200) General Chemistry (CHEM 141 and 317) Organic Chemistry (CHEM 205-206) Physics (PHYS 131 plus either 132, 133, or 134) Microbiology (BIOL 229) Biochemistry (CHEM 326 or 327)	For Pre-dental only: Third general biology course (BIOL 202)
Pre-pharmacy	General Biology (BIOL 199 or 190 or 192, and 200) General Chemistry (CHEM 141 and 317) Organic Chemistry (CHEM 205-206) Physics (PHYS 131 plus either 132, 133, or 134) Human Physiology (BIOL 220) and Human Anatomy Microbiology (BIOL 229) Economics (ECON 101) Statistics (MATH 119 or BIOL 320) Psychology (PSYC 100) Speech (RHCS 101)	None
Pre-physician assistant	General Biology (BIOL 199 or 190 or 192, and 200) Genetics (BIOL 107 or 314 or 384) – consult PA programs Microbiology (BIOL 229) Human Physiology (BIOL 220) and Human Anatomy General Chemistry (CHEM 141 and 317) Organic Chemistry (CHEM 205-206) Biochemistry (CHEM 326 or 327) Psychology (PSYC 100)	None
Pre-physical therapy	General Biology (BIOL 199 or 190 or 192, and 200) General Chemistry (CHEM 141 and 317) Organic Chemistry (CHEM 205 and 206) Physics (PHYS 131 plus either 132, 133, or 134) Human Physiology (BIOL 220) and Human Anatomy Statistics (MATH 119 or BIOL 320) Psychology (PSYC 100) Developmental Psychology (No UR equivalent)	None
Pre-nursing	Consult Dr. Vaughan	None

*Requirements may vary; be sure to consult with specific schools you are considering.