Pre-Health Curriculum Planning for Students entering Fall 2021

The following guidelines should be used in planning your first semester schedule. The Pre-Health Curriculum chart on the following page lists the courses commonly required by various pre-health tracks. Contact Dr. John Vaughan, Director of Pre-health Education, at jvaugha2@richmond.edu to be included on the Pre-health Studies email distribution list and to receive notification of the pre-health orientation meeting at the start of the semester.

1. It is recommended to take at least one majors-level science course in your first semester, regardless of your intended major.
   a. If you are considering a Chemistry major, you should take CHEM 141 in your first semester, unless you will be entering the SMART course sequence.
   b. If you are considering a Biology or Biochemistry & Molecular Biology major you should take CHEM 141 in your first semester, unless you will be entering the SMART course sequence. Students may also take BIOL 199 in the fall, but it can be taken in the spring of the first year. Students who wish to take BIOL 199, but do not get a seat in the fall, should email Prof. Krista Stenger (kstenger@richmond.edu) so that the Biology department can plan for the needed sections in the spring.
   c. If you are considering a Physics major, you are encouraged to take PHYS 131 in your first semester.
   d. If you are considering a non-science major, you are encouraged to take CHEM 141 in your first semester.

2. 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.

3. AP/IB science credit
   - **Chemistry:** Many health professional schools do not accept AP/IB credit for general chemistry unless advanced coursework (beyond the usual professional school requirements) is taken in chemistry. For this reason, it is inadvisable to use AP/IB credit for general chemistry (i.e., CHEM 141) unless you intend to major or minor in Chemistry or major in Biochemistry & Molecular Biology.
   - **Biology:** AP credit for Biology is applicable only to BIOL 120, which is a non-majors course that does not satisfy health professional school admission requirements.
   - **Physics:** Most health professional schools accept AP/IB credit for physics.

4. It is best to not exceed 4 units of coursework per semester during your freshman year in order to allow a smoother transition into college academics.
# 2021 Richmond Pre-health Curriculum Guide

<table>
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<th>Track</th>
<th>Common Professional School Requirements* (UR equivalent given parenthetically)</th>
<th>Additional Recommended Courses</th>
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| Pre-medical | General Biology (BIOL 199 or 192, plus 200)  
General Chemistry (CHEM 141 or 192, plus 317)  
Organic Chemistry (CHEM 205-206)  
Biochemistry (CHEM 326)  
Physics (PHYS 127 or 131 plus either PHYS 128 or 132)**  
Psychology (PSYC 100)***  
Sociology (SOC 101)***  
Statistics (1 of MATH 209, BIOL 320, CHEM 300, PSYC 200, SOC 211)*** | HS 100 Introduction to Healthcare Studies  
PHIL 251 Elementary Symbolic Logic (also satisfies FSSR)  
LDST 377 Ethical Decision Making in Healthcare –OR—PHIL 265 Bioethics |
| Pre-dental and Pre-veterinary | General Biology (BIOL 199 or 192, plus 200)  
General Chemistry (CHEM 141 or 192, plus 317)  
Organic Chemistry (CHEM 205-206)  
Biochemistry (CHEM 326)  
Physics (PHYS 127 or 131 plus either PHYS 128 or 132)**  
Microbiology (BIOL 229) | HS 100 Introduction to Healthcare Studies  
Biol 202  
Biol 3xx electives (2-3)  
Public speaking (RHCS 100) |
| Pre-pharmacy | General Biology (BIOL 199 or 192, plus 200)  
General Chemistry (CHEM 141 or 192, plus 317)  
Organic Chemistry (CHEM 205-206)  
Physics (PHYS 127 or 131 plus either PHYS 128 or 132)**  
Human Anatomy (BIOL 219) and Human Physiology (BIOL 220)  
Microbiology (BIOL 229)  
Economics (ECON 101)  
Statistics (MATH 209 or BIOL 320) | HS 100 Introduction to Healthcare Studies |
| Pre-physical therapy | General Biology (BIOL 199 or 192, plus 200)  
Chemistry (CHEM 141 or 192, plus either CHEM 205 or CHEM 205, 206, 317); consult individual PT programs  
Physics (PHYS 127 or 131 plus either PHYS 128 or 132)**  
Human Anatomy (BIOL 219) and Human Physiology (BIOL 220)  
Statistics (MATH 209 or BIOL 320)  
Psychology (PSYC 100)  
Developmental Psychology (No single course equivalent at UR) | HS 100 Introduction to Healthcare Studies |
| Other pre-health tracks (e.g., nursing) | Consult Dr. John Vaughan, Director of Pre-health Education | HS 100 Introduction to Healthcare Studies |

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

**MATH 211-212 pre-requisite / co-requisite for PHYS 131-132

***For MCAT preparation; not commonly required by medical schools