

AP Credit Guidelines for Freshman Pre-Health Students

Pre-health students must plan to meet the admissions requirements of the health professions schools in which they are interested. Requirements vary somewhat from program to program, so it is wise to research the requirements at specific programs and schools. The set of courses listed below will generally satisfy the requirements of many health professions schools.

- 1 yr. of general chemistry (inorganic) with associated labs
- 1 yr. of organic chemistry with associated lab(s)
- 1 yr. of biological science coursework with associated labs
- 1 yr. of general physics with associated labs
- 1 yr. of English coursework (composition and/or literature)
- 1 yr. of mathematics (calculus is required by a small number of schools; statistics accepted)
- 1 sem. of biochemistry (required by 19 schools, recommended at 38 more)

Students receiving AP credit for biology, chemistry and/or physics will be required by most health professions schools to show supplemental college level coursework in the subject areas in which AP credits are awarded. First-year students with AP credit in one of the prerequisite sciences are urged to begin science coursework at Johns Hopkins in a different introductory level science rather than choosing an intermediate course in the area of the AP credit.

A student's choice of major, as well as the strength of his/her background, will influence decisions regarding AP credit. Be sure to speak with a pre-professional advisor in the Office of Pre-Professional Programs and Advising or an advisor in either the Office of Academic Advising (Krieger School of Arts & Sciences) or the Office of Academic Affairs (Whiting School of Engineering) to determine whether your coursework is compliant with health professions schools requirements.

AP Course Translations

The Offices of Pre-Professional Advising, Academic Advising, and Engineering Advising recommend that incoming students closely consider the guidelines that appear below. The recommendations differ depending upon whether students are pursuing a major in Arts & Sciences or Engineering. All students should note that, regardless of whether coursework is pursued in Arts & Sciences or Engineering, there are some modifications for students who anticipate applying to University of California medical schools (customarily, California residents). **As a general rule, AP credit cannot substitute for college-level required courses at the University of California schools.**

Specific questions should be directed to any of the following three offices:

Office of Academic Advising
Garland Hall, Suite 3A
410-516-8216
advising@jhu.edu

Engineering Academic Advising
103 Shaffer Hall
(410) 516-7395
wseadvising@jhu.edu

Pre-Professional Advising
Garland Hall, Suite 300
(410) 516-4140
preprofessional@jhu.edu

Additional Resources

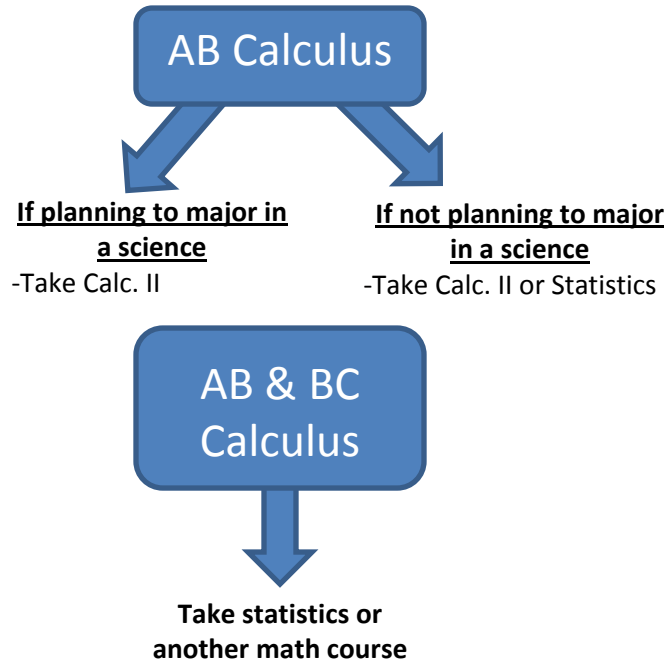
- <http://web.jhu.edu/prepro/health/ap.html>
- http://web.jhu.edu/freshman_advising
- <http://engineering.jhu.edu/academic-advising/>



Read this guide
& APs will be a
breeze!

Arts & Sciences

I have AP Calculus credit.
What should I take in college
to fulfill the pre-health
requirements?



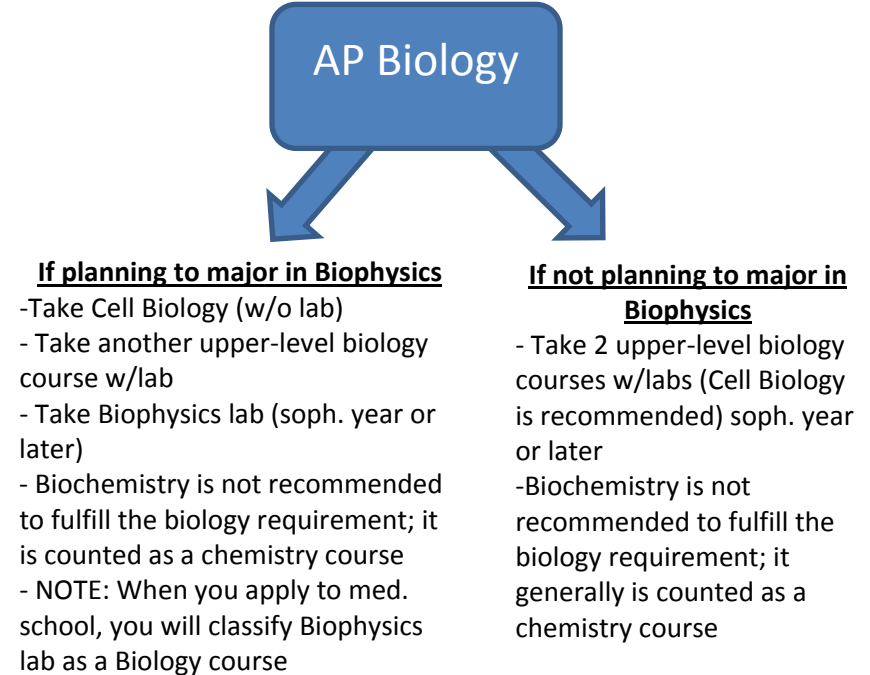
Medical School Math requirement:

- 1 year of math; if coming in with AP credit, 1 semester of math

California Med. Schools:

- 1 year of math during college; AP credits cannot substitute for college-level coursework

I have AP Biology credit.
What should I take in college
to fulfill the pre-health
requirements?



Medical School Biology requirement:

- 1 year of biology coursework (either intro. or upper-level) w/labs; AP credits cannot substitute for college-level coursework

California Med. Schools:

- 1 year of biology coursework (either intro. or upper-level) w/labs; AP credits cannot substitute for college-level coursework
- NOTE: Several (Irvine, UCSF) require 1.5 years of Biology courses

Arts & Sciences

**I have AP Chemistry credit.
What should I take in college
to fulfill the pre-health
requirements?**

AP Chemistry



- Take Org Chem. I & II (w/lab)
(not recommended for freshman year)
- Take any upper level Chemistry course w/lab
(Biochemistry w/lab is recommended)
- NOTE: When you apply to med. school, you will
classify Biochemistry as a Chemistry course

Medical School Chemistry requirement:

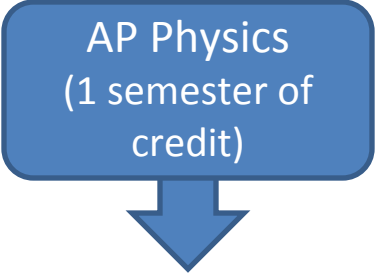
- 1 year of inorganic chemistry w/labs; if coming in with AP
credit, 1 semester upper level chem. w/lab
- 1 year of organic chemistry w/lab

California Med. Schools:

- 1 year of inorganic chemistry w/labs; if coming in with AP
credit, we recommend taking Gen. Chem. II during the
spring semester of freshman year
- 1 year of organic chemistry w/lab

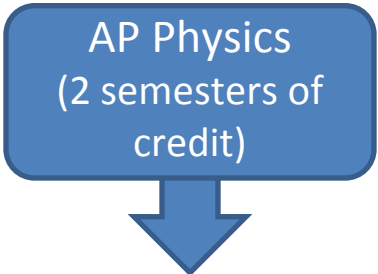
**I have AP Physics credit.
What should I take in college
to fulfill the pre-health
requirements?**

AP Physics
(1 semester of
credit)



- Take Physics II (w/lab)
NOTE: Offered in both fall & spring

AP Physics
(2 semesters of
credit)



- Take Physics II (w/lab) or an
intermediate level Physics course

Medical School Physics requirement:

- 1 year of Physics w/labs; if coming in with AP
credit, 1 semester of Physics w/lab

California Med. Schools:

- 1 year of Physics w/labs; some schools do not
accept AP credit; in that case, we recommend
taking Physics II w/lab and an intermediate level
Physics course or taking 2 intermediate level
Physics courses

Engineering

I have AP Calculus credit.
What should I take in college
to fulfill the pre-health
requirements?

AB Calculus



If pursuing BME or
ChemBE

- Take Calc. II

AB & BC
Calculus



If pursuing BME or
ChemBE

- Take Calc. III or Linear Algebra

Medical School Math requirement:

- 1 year of math; if coming in with AP credit, 1 semester of math

California Med. Schools:

- 1 year of math during college; AP credits cannot substitute for college-level coursework

I have AP Biology credit.
What should I take in college
to fulfill the pre-health
requirements?

AP Biology



If pursuing BME

- Take Systems Bioengineering sequence (w/labs)
- NOTE: When you apply to med. school, you will classify your Systems Bioengineering courses as Biology courses

If pursuing ChemBE

- Take 2 upper-level biology courses w/labs (Cell Biology is recommended) soph. year or later
- Biochemistry is not recommended to fulfill the biology requirement; it generally is counted as a chemistry course

Medical School Biology requirement:

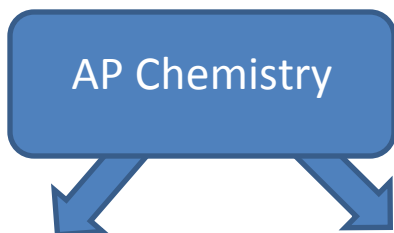
- 1 year of biology coursework (either intro. or upper-level) w/labs; AP credits cannot substitute for college-level coursework

California Med. Schools:

- 1 year of biology coursework (either intro. or upper-level) w/labs; AP credits cannot substitute for college-level coursework
- NOTE: Several (Irvine, UCSF) require 1.5 years of Biology courses

Engineering

**I have AP Chemistry credit.
What should I take in college
to fulfill the pre-health
requirements?**



If pursuing BME

- Take Org. Chem. I & II (plus lab)
- Take Molecules and Cells or Biochemistry (plus lab)
- NOTE: When you apply to med. school, you will classify Molecules and Cells or Biochemistry as a Chemistry course

If pursuing ChemBE

- Take Org. Chem. I & II (plus lab)
- Take any advanced course within your major (i.e. Thermodynamics)
- NOTE: When you apply to med. school, you will classify all advanced ChemBE courses with a chemistry focus as Chemistry courses

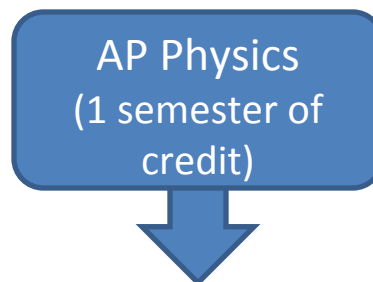
Medical School Chemistry requirement:

- 1 year of inorganic chemistry w/labs; if coming in with AP credit, 1 semester upper level chem. w/lab
- 1 year of organic chemistry w/lab

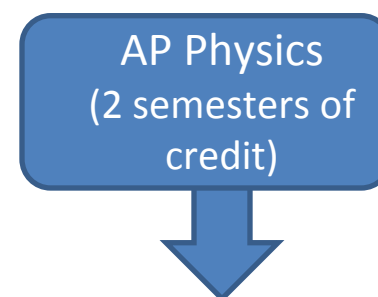
California Med. Schools:

- 1 year of inorganic chemistry w/labs; if coming in with AP credit, we recommend taking Gen. Chem. II during the spring semester of freshman year
- 1 year of organic chemistry w/lab

**I have AP Physics credit.
What should I take in college
to fulfill the pre-health
requirements?**



- Take Physics II (w/lab)



- Take Physics II (w/lab) or an intermediate level Physics course

Medical School Physics requirement:

- 1 year of Physics w/labs; if coming in with AP credit, 1 semester of Physics w/lab

California Med. Schools:

- 1 year of Physics w/labs; some schools do not accept AP credit; in that case, we recommend taking Physics II w/lab and an intermediate level Physics course or taking 2 intermediate level Physics courses