



PRE-REQUISITE COURSES FOR MEDICAL, DENTAL, & VET PROGRAMS

Consider the options below in order to fulfill pre-requisite coursework for most medical, dental and veterinary programs. Note: this is not an exhaustive list and you should speak with a career advisor prior to registration. For guidance on AP credits, please see the back of this page.

SUBJECT AREA	COURSE REQUIREMENTS	UR COURSES THAT FULFILL PRE-REQS
BIOLOGY	Two semesters of Biology coursework with labs. One semester of Genetics is highly recommended	BIOL 110L • BIOL 111L • BIOL 198L BIOL 112L • BIOL 113L • BME 258 BIOL 190L • BIOL 198L
BIOCHEMISTRY	One semester of Biochemistry	BIOL 250 with optional lab • CHEM 262
CHEMISTRY	Two semesters of Intro Chemistry with labs Two semester of Organic Chemistry with labs	CHEM 131 • CHEM 132 • CHEM 137 CHEM 211 CHEM 171 • CHEM 172 • CHEM 203 CHEM 204
MATH/STATISTICS	One semester of Statistics Meet the Calculus requirement for UR Physics	STAT 180 • STAT 190 • BME 221 MATH 141 • MATH 142 • MATH 143 MATH 161 • MATH 162 • MATH 171
PHYSICS	Two semesters Physics with labs	PHYS 113 • PHYS 114 • PHYS 121 PHYS 122 • PHYS 123 • PHYS 141 PHYS 142
ENGLISH/WRITING	6 Credit Hours	WRTG 105 • WRTG 105A • WRTG 105B • WRTG 105E & Upper-level writing requirement(s) within major

To better prepare for interview questions and standardized tests like the MCAT or DAT that address psychosocial contexts of health, students are strongly encouraged to consider coursework in the humanities and social sciences. Students should meet with a Career Advisor in the Greene Center to discuss their options

Examples of courses to consider:

MHB 210 • PHLT 101 • PHLT 102 • PHIL 225 • PHIL 311 • PSYC 101 • PSYC 171

AP COURSES AND PRE-REQUISITES: Note that though AP courses may be accepted for University of Rochester course credit, generally they do not meet the pre-requisites for most medical and health profession schools or the requirements of all University of Rochester majors.

- Students should consider the requirements for their particular major in their planning.
- In general, if students receive AP credit for AP Biology or Physics, they should plan to take two college level, lab-based courses in these areas to fulfill their pre-requisites. In general, for Biology, this can be satisfied by BIOL 112 and 113. (Some students choose to simply take BIOL 110 and 111 and forego AP Biology credits to fulfill their pre-requisite courses).
- If students receive AP credit for CHEM 131, they can take CHEM 171/172 (First-year Organic Chemistry). Students will then also need to take CHEM 132 and either BIOL 250 (Biochemistry) with the 1 credit optional lab or CHEM 211, (or all three) to meet the pre-health pre-requisites. (Some students choose to simply take CHEM 131 and CHEM 132 and forego AP Chemistry credits to fulfill their prerequisites).
- Students can discuss their own individual situation with the Healthcare Community Advisors in the Greene Center and/or can check the particular requirements of graduate programs they are interested in to find requirements for those particular schools.

COURSE TITLES:

BIOL 110L: PRINCIPLES OF BIOLOGY 1 WITH LAB
BIOL 111L: PRINCIPLES OF BIOLOGY 2 WITH LAB
BIOL 112L: PERSPECTIVES IN BIOLOGY 1 WITH LAB
BIOL 113L: PERSPECTIVES IN BIOLOGY 2 WITH LAB
BIOL 190: GENETICS & THE HUMAN GENOME
BIOL 198L: PRINCIPLES OF GENETICS WITH LAB
BIOL 250: INTRODUCTION TO BIOCHEMISTRY WITH LAB
BME 221: BIOMEDICAL COMPUTATION AND STATISTICS
BME 258: BIOMEDICAL ULTRASOUND
CHEM 131: CHM CONCEPTS, SYST, PRACT I
CHEM 132: CHM CONCEPTS, SYST, PRACT II
CHEM 137: CHEMICAL PRINCIPLES FOR ENGINEERS
CHEM 171: FIRST-YEAR ORGANIC CHEMISTRY
CHEM 172: FIRST-YEAR ORGANIC CHEMISTRY II
CHEM 203: ORGANIC CHEMISTRY
CHEM 204: ORGANIC CHEMISTRY II
CHEM 211: INORGANIC CHEMISTRY I
CHEM 262: BIOLOGICAL CHEMISTRY
MHB 210: BIOETHICS AT THE BEDSIDE:
HOW CLINICIANS THINK ETHICALLY
MATH 141: CALCULUS I
MATH 142: CALCULUS II
MATH 143: CALCULUS III
MATH 161: CALCULUS IA
MATH 162: CALCULUS IIA
MATH 171: HONORS CALCULUS I
PHLT 101: INTRO TO PUBLIC HEALTH
PHLT 116: INTRO TO THE US HEALTH SYSTEM
PHIL 102: ETHICS
PHIL 225: ETHICAL DECISIONS IN MEDICINE
PHIL 311: SEMINAR IN BIOETHICS

PHYS 113: GENERAL PHYSICS I
PHYS 114: GENERAL PHYSICS II
PHYS 121: MECHANICS
PHYS 122: ELECTRICITY & MAGNETISM
PHYS 123: WAVES & MODERN PHYSICS
PHYS 141: MECHANICS (HONORS)
PHYS 142: ELECTRICITY & MAGNETISM (HONORS)
PSYC 101: INTRO TO PSYCHOLOGY
PSYC 171: SOCIAL AND EMOTIONAL DEVELOPMENT
STAT 180: INTRO TO APPLIED STATISTICAL
METHODOLOGY
STAT 190: INTRODUCTION TO STATISTICAL
METHODOLOGY
WRTG 105 (105A/105B/105E): WRITING COURSES