# PRE-PUBLIC HEALTH

# Introduction

Practitioners in public health strive to improve the economic, social, and enviromental health of communities by focusing on a broad range of public health issues, including (but not limited to): disparities in healthcare access and outcomes, social isolation, violence and trauma, food security, and lack of access to healthy and affordable nutrition. Practitioners focus on areas such as biostatistics, community health and health behavior, and epidemiology. Students interested in a career in public health may pursue any major along with completing specific prerequisites. Selecting a major and a minor from a combination of science and social science fields is ideal (e.g. major in Sociology, Psychology, or Environmental Studies and minor in Biology). Strong quantitative and analytical skills are desired. Most public health masters programs have very few specific prerequisite courses but typically require a minimum of a bachelor degree and a competitive GPA and score on the GRE. Students should gain a thorough understanding of the profession through a range of shadowing experiences and community engagement related to the social determinants of health and health disparities. Students should work with the Pre-Health advisor to select appropriate coursework based on their schools of interest, area of concentration within public health desired, and co-curricular experiences. In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (http:// catalog.canisius.edu/undergraduate/academics/curricular-information/preprofessional-programs/pre-medical-pre-health-professions/).

# Recommended Pre-Public Health Courses

Academic admission requirements vary by school, but the following courses are recommended:

#### Biology

One year of general biology and one year of anatomy & physiology with laboratories are recommended:

Code	Title	Credits		
One Year of General Biology				
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4		
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4		
One Year of Anatomy/Physiology				
Select one of the following:				
Option 1:				
BIO 114 & 114L	Human Anatomy and Physiology I and Human Anatomy and Physiology I Laborator	4 y		
BIO 115 & 115L	Human Anatomy and Physiology II and Human Anatomy and Physiology II Laborator	4 ry		
Option 2:				
BIO 324 & 324L	Human Anatomy and Human Anatomy Lab	4		
BIO 340 & 340L	Physiology and Physiology Laboratory	4		

# Chemistry

One semester of general chemistry with laboratory is recommended:

Code	Title	Credits
CHM 111	General Chemistry I	4
& 111L	and General Chemistry I Laboratory	

#### Statistics and Research Methods

One semester of statistics and one semester of research methods are recommended:

<b>Code</b> Statistics	Title	Credits		
PSY 201	Basic Statistics for Behavioral Sciences	3 or 4		
or MAT 131	Statistics for Social Sciences			
or MAT 141	Inferential Statistics and Computers for Science			
or KIN 398	Statistics and Research Design			
Research Methods				
PSY 202	Research Methods in Psychology	3		

## Additional Pre-Public Health Courses

Additional quantitative coursework in statistics (MAT 351 or PSY 401) and/ or calculus (MAT 111) are also recommended. Students may also wish to complete advanced research methods (PSY 402).

Additional coursework selected from nutrition (BIO 109 or KIN 115), sociology (SOC 110, SOC 111, SOC 234, SOC 315), psychology (PSY 101, PSY 102, PSY 203, PSY 318), and ethics and justice (PHI 243, PHI 244, RST 340, RST 345) are recommended.

## **Elective Courses**

HRP 101 allows students to explore different health professions.

HRP 111 introduces students to medical terminology.

 ${\rm HRP}$  201 and  ${\rm HRP}$  202 allow students to explore areas of medicine in more depth.

HRP 498 is an internship in medical informatics. A medical scribe internship is also available.

HRP 498A is a medical (and public health) service learning trip.