

# PUBLIC HEALTH (AS DEGREE S0428)

## Natural Sciences Division Degree S0428

The AS degree in Public Health at Mt San Antonio College is an interdisciplinary program grounded in the biological sciences and designed to prepare students for entry level employment in public health fields. Students completing this program will exemplify a high level of health literacy and will be exposed to a large variety of disciplines. Through this preparation, they will improve their understanding of the relationship of the environment to health, recognize and evaluate the economic impact of changing demographics on health care, identify and control disease outbreaks, and develop interventions to promote healthy behavior. Successful completion of this degree can lead to employment opportunities as a community or public health care worker, health educator, epidemiologist, and occupational and safety technician, as well as other health-related careers. In addition, this program can provide advancement opportunities for those completing other CTE programs in health care, such as nursing. In order to ensure adequate preparation in this field and to allow for training in specialty areas, such as environmental health, program completion requires a minimum of 61 and maximum of 64 unit credits, depending on which required courses students complete.

This suggests that some students may require an additional semester or more for completion, depending on their level of preparation on entering the program. Community college programs in public health are not yet accredited by ASPPH. This program follows the guidelines of the ASPPH in hopes that accreditation will follow as more associate level students enter the public health workforce.

This degree requires the completion of General Education coursework plus the following:

### Required Courses

Course Prefix	Course Name	Units
Select one of the following sequences:		
ANAT 10A or ANAT 35	Introductory Human Anatomy Human Anatomy	8-10
ANAT 10B or ANAT 36	Introductory Human Physiology Human Physiology	
ANTH 5 or SOC 1 or SOC 1H	Cultural Anthropology Introduction to Sociology Introduction to Sociology - Honors	3
BIOL 1 or BIOL 4 or BIOL 4H	General Biology Biology for Majors Biology for Majors - Honors	4
CHEM 10 or CHEM 40	Chemistry for Allied Health Majors Introduction to General Chemistry	5
MATH 110 or MATH 110H or PSYC 10 or SOC 23	Elementary Statistics Elementary Statistics - Honors Statistics for the Behavioral Sciences Introduction to Statistics in Sociology and Social Sciences	3-4
MICR 1 or MICR 22	Principles of Microbiology Microbiology	4 - 5
PUBH 22	Introduction to Epidemiology	3
PUBH 24	Introduction to Public Health	3
PUBH 26	Introduction to Global Public Health	3
PUBH 27	Public Health and the Environment	3

PUBH 28	Public Health and Bioethics	3
Choose two courses from the following		6
ANAT 38	Pathophysiology	
BIOL 5	Contemporary Health Issues	
MICR 26	Introduction to Immunology	
NF 25 or NF 25H	Introduction to Nutrition Science Introduction to Nutrition Science - Honors	
PUBH 20	History of Western Medicine	
PUBH 29	Public Health Microbiology	
PUBH 30	Infectious Disease Epidemiology and Outbreak Investigation	

**Total Units** 48-52

### Program Learning Outcomes

Upon successful completion of this program, a student will be able to:

- Explain how the history, philosophy, and literature of public health reflect broader social influences and movements that influence our view of health.
- Explain the population health perspective and the methods used in public health to define and address population-wide/social concerns and the needs of vulnerable populations through the provision of essential services.
- Apply options for intervention frameworks including when (primary, secondary, tertiary), who (individual, population at risk, general population), and how (education, motivation, obligation) to intervene.
- Explain principles of epidemiology that are necessary in order to understand health and impairments of health, including the uses of rates, the meaning of causation, and the evaluation of the effectiveness of interventions.
- Apply the principles of epidemiology to assigned reading of research articles, including case-control, cohort studies, and randomized clinical trials.
- Explain from a global perspective the burden of disease, socioeconomic determinants of health, the links between health and development, and approaches to global cooperation to monitor, promote, and protect health.
- Describe biological principles needed to understand public health issues across the life span and apply these principles to public health interventions to eliminate, prevent, and control disease and to minimize the impact of disease on health.
- Explain the use of clinical interventions for assessing, protecting, and improving health and preventing, detecting, treating, and minimizing the impact of disease.
- Explain the way biological, environmental, and social/cultural factors interact in disease production and understand how these influences can impact prevention strategies.
- Describe the historical examples of the changing definitions of public health in a variety of cultures and times, including major scientific advancements.

Review Student Learning Outcomes (SLOs) (<http://www.mtsac.edu/instruction/outcomes/sloinfo.html>) for this program.