

# PUBLIC HEALTH, BS

## Program Description

Designed to build and strengthen the public health workforce, this proposed innovative Bachelor of Science degree in public health (BSPH) prepares students for new approaches to emerging global and public health issues, including prevention and communicable disease, environmental health, public health surveillance, and health management in a context of human rights and cultural understanding. The proposed Bachelor of Science in Public Health curriculum was developed in accordance with the Council on Education for Public Health (CEPH).

## Student Learning Outcomes

Students will demonstrate an understanding of the principles, practices, and applications common to public health promotion and disease prevention.

Students will be able to:

- Describe and apply basic public health sciences, including epidemiology, health and policy administration, behavioral and social sciences, biostatistics, and environmental and occupational public health, to the prevention of illness and injury.
- Use information literacy skills and research methods appropriate to public health.
- Communicate effectively in writing and orally in ways appropriate to public health
- Discuss and apply cultural, ethical, and policy aspects of public health.
- Develop and manage strategic planning and budgets.

## Program Requirements for Public Health

Prior to designation as a BSPH major, students must meet with the advisor to create a degree completion and minor area of specialization plan.

### Grading

1. A scholastic grade point average of 2.5 is a minimum requirement in the upper division courses designated for the Bachelor of Science in Public Health. A minimum grade of C is required in all courses in the BSPH major.
2. If a student earns a grade of D, F, or W in a public health course, that course must be repeated. A course in which a grade of less than C (i.e., D, F, or W, Withdrawal) was earned may be repeated only once.
3. A student who has earned a grade of less than C (i.e., D, F, or W, Withdrawal) in two courses or who has earned a grade of less than C (D, F, or W, Withdrawal) twice in the same course will be dismissed from the BSPH program.
4. Students receiving a grade of D, F, or W (Withdrawal) or I (Incomplete) in a course may not progress to courses for which that course is a prerequisite.

## General Requirements

Requirements	Credit Hours
Core Curriculum Program ( <a href="http://catalog.tamucc.edu/undergraduate/core-curriculum-program/">http://catalog.tamucc.edu/undergraduate/core-curriculum-program/</a> )	42

University Seminar (when applicable) <sup>1</sup>	0-2
Required Courses	48
Electives	24
Other (Public Health Internship)	6
<b>Total Credit Hours</b>	<b>120-122</b>

<sup>1</sup> Full-time, first time in college students are required to take university seminar.

- USSE 1201 University Seminar (2 sch)

## Program Requirements

Code	Title	Hours
<b>Full-time, First-year Students</b>		
USSE 1201	University Seminar	2
<b>Core Curriculum Program</b>		
University Core Curriculum		42
<b>Public Health Major Requirements</b>		
PUHE 1310	Introduction to Public Health	3
PUHE 1320	Introduction to Emergency Management	3
PUHE 1340	Primary Care and Public Health	3
PUHE 3320	Biostatistics in Public Health	3
PUHE 3330	Healthy Behavior and Chronic Disease	3
PUHE 3340	Healthy Policies for Healthy Living	3
PUHE 3360	Qualitative Research for Public Health	3
PUHE 3380	Field Epidemiology and Outbreak Investigations	3
PUHE 4380	Public Health Capstone	3
PUHE 4390	Topics in Public Health (*Will be taken twice)	6
PUHE 4600	Public Health Internship	6
HCAD 3300	The Health Care System	3
HCAD 3310	Epidemiology	3
HCAD 3340	Health Program Planning and Evaluation	3
HCAD 4350	Global Health/Health Disparities	3
ESCI 4320	Environmental Health	3
<b>Electives</b>		
Electives		24
<b>Total Hours</b>		<b>122</b>

## Course Sequencing

<b>First Year</b>		
<b>Fall</b>		<b>Hours</b>
POLS 2305	U.S. Government and Politics	3
BIOL 1406	Biology I	4
USSE 1201	University Seminar	2
COMM 1311	Foundation of Communication	3
Creative Arts Core Requirement		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 1301	Writing and Rhetoric I	3
POLS 2306	State and Local Government	3
MATH 1442	Statistics for Life	4

BIOL 1407	Biology II	4
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Language, Philosophy, and Culture Core Requirement		3
Social & Behavioral Science Core Requirement		3
PUHE 1310	Introduction to Public Health	3
HIST 1301	U.S. History to 1865	3
PUHE 1320	Introduction to Emergency Management	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Elective		3
Elective		3
HIST 1302	U.S. History Since 1865	3
PUHE 1340	Primary Care and Public Health	3
HCAD 3300	The Health Care System	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Elective		4
Elective		3
Component Area Option Core Requirement		3
HCAD 3310	Epidemiology	3
HCAD 3340	Health Program Planning and Evaluation	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
HCAD 4350	Global Health/Health Disparities	3
PUHE 3320	Biostatistics in Public Health	3
PUHE 3330	Healthy Behavior and Chronic Disease	3
PUHE 3340	Healthy Policies for Healthy Living	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Elective		3
ESCI 4320	Environmental Health	3
PUHE 3380	Field Epidemiology and Outbreak Investigations	3
PUHE 4390	Topics in Public Health	3
PUHE 3360	Qualitative Research for Public Health	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PUHE 4390	Topics in Public Health	3
PUHE 4380	Public Health Capstone	3
PUHE 4600	Public Health Internship	6
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>120</b>

## Courses

### PUHE 1310 Introduction to Public Health

#### 3 Semester Credit Hours (3 Lecture Hours)

This course provides an introduction to the infrastructure of public health; the analytical tools employed by public health practitioners; biopsychosocial perspectives of public health problems; health promotion/disease prevention; quality assessment in public health; and legal and ethical concerns.

### PUHE 1320 Introduction to Emergency Management

#### 3 Semester Credit Hours (3 Lecture Hours)

This course introduces students to the emergency management profession. Topics include the history of emergency management, the identification and assessment of hazards, risk, and vulnerability, and the four phases of emergency management (mitigation, preparedness, response, and recovery.) Special emphasis is given to the communication function, international disaster management, and the influence of hazards including climate change and terrorism. The course concludes with a discussion on the future of emergency management.

### PUHE 1340 Primary Care and Public Health

#### 3 Semester Credit Hours (3 Lecture Hours)

This course explores historical and current interactions, achievements, and challenges of primary care and public health. It will analyze the impact of common medical conditions such as obesity, diabetes, mental health disorders, and others on individuals, their families, and society.

### PUHE 3320 Biostatistics in Public Health

#### 3 Semester Credit Hours (3 Lecture Hours)

Fundamentals of biostatistics and basic methods for analysis of continuous and binary outcomes for one, two, or several groups. Includes: summarizing and displaying data; probability; statistical distributions; central limit theorem, confidence intervals, hypothesis testing; comparing means of continuous variables between two groups; comparing proportions between two groups; simple and multiple linear regression. Hands-on data analysis using software and statistical applications in public health.

### PUHE 3330 Healthy Behavior and Chronic Disease

#### 3 Semester Credit Hours (3 Lecture Hours)

This course introduces healthy behavior concepts through applications to chronic disease prevention. The focus is on smoking, dietary behaviors, and physical activity and is organized around relationships to health, measurement, influencing factors, interventions, and translation to public health practice.

### PUHE 3340 Healthy Policies for Healthy Living

#### 3 Semester Credit Hours (3 Lecture Hours)

This course covers the rationale for and effectiveness of policies to influence nutrition, physical activity, and substance use behavior. Policies include legalization, taxation, labeling, product manufacturing, warning labels, licensing, marketing, and counter-marketing practices and restrictions on use.

### PUHE 3360 Qualitative Research for Public Health

#### 3 Semester Credit Hours (3 Lecture Hours)

An overview of the role of qualitative research methods in public health. The course will focus on qualitative research as it relates to formative program design, community-based participatory approaches, and as a tool for amplifying voices and elucidating both complex social-ecological processes and internal individual experiences. Throughout the term, students will work in teams to design, conduct, analyze, and report a full qualitative study on a public health topic of their choosing.

**PUHE 3380 Field Epidemiology and Outbreak Investigations****3 Semester Credit Hours (3 Lecture Hours)**

This course consists of a series of practical epidemiological infectious and non-infectious disease paper- and computer-based exercises. Students will have the opportunity to apply their epidemiological and biostatistical skills to real-world situations. The course is highly interactive and challenges students' knowledge and critical thinking capacities. Students will give presentations, write a scientific abstract and press release, and develop a poster.

**PUHE 4380 Public Health Capstone****3 Semester Credit Hours (3 Lecture Hours)**

This course serves as the culminating experience for the BS in public health (BSPH) majors. Students will integrate the skills and knowledge gained throughout the BSPH program and learn critical elements of public health research and practice. They will also interpret and contextualize findings from their projects completed in the first part of the series. Oral and written presentations will focus on disseminating public health information in diverse formats.

**PUHE 4390 Topics in Public Health****3 Semester Credit Hours (3 Lecture Hours)**

Topics in the field of public health can be taken twice.

**PUHE 4600 Public Health Internship****6 Semester Credit Hours**

This course represents an experiential learning opportunity at a pre-approved community site.