

# PUBLIC HEALTH - BS

Public Health professionals with a Bachelor of Science in Public Health (BSPH) are prepared to:

- understand the history, ethics, and traditions of the field of public health.
- value the scope and nature of problems and challenges addressed by the field of public health.
- appreciate the breadth, depth, and variety of intellectual and practical skills employed in the field of public health.
- appreciate the variety of communication methods and cultural competence required in the field of public health.

The BSPH program is based on a philosophy of health promotion and disease prevention, to improve the quality of life of individuals, families and communities. The BSPH discipline focuses on four areas:

1. the multiple determinants of health, including biological, environmental, sociocultural, health service, and economic factors,
2. identification of scientific data, tools of informatics, and other information for identifying indicators of health status and health disparities and assessing the well-being of a community,
3. addressing major local, national, and global health challenges, and
4. designing public health approaches and interventions that improve health outcomes, population health and well-being.

The Bachelor of Science in Public Health degree program is more than a means to produce ready public health practitioners. It can complement or enrich a traditional biology-based pre-health degree plan for students intending professional education in medicine, nursing, allied health or other health professions. Notably the program establishes a specific entry-level baccalaureate degree in the Public Health academic pathway which, until recently, had started with a master's degree.

This program is approved to be offered at the Texas A&M Higher Education Center in McAllen, Texas.

## Program Requirements

### First Year

Fall		Semester Credit Hours
BIOL 111	Introductory Biology I	4
Select one of the following:		3
COMM 203	Public Speaking	
COMM 205	Communication for Technical Professions	
COMM 243	Argumentation and Debate	
ENGL 104	Composition and Rhetoric	
ENGL 203	Writing about Literature	
ENGL 210	Technical and Professional Writing	
PERF 407	Performing Literature	
Select one of the following:		3
MATH 140	Mathematics for Business and Social Sciences	
MATH 142	Business Calculus	
MATH 147	Calculus I for Biological Sciences	
MATH 148	Calculus II for Biological Sciences	

MATH 151	Engineering Mathematics I	
MATH 152	Engineering Mathematics II	
MATH 168	Finite Mathematics	
MATH 171	Calculus I	
MATH 172	Calculus II	
PHIL 240	Introduction to Logic	
Social and Behavioral Sciences ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences</a> )		3
<b>Semester Credit Hours</b>		<b>13</b>
<b>Spring</b>		
BIOL 112	Introductory Biology II	4
Select one of the following:		3
COMM 203	Public Speaking	
COMM 205	Communication for Technical Professions	
COMM 243	Argumentation and Debate	
ENGL 104	Composition and Rhetoric	
ENGL 203	Writing about Literature	
ENGL 210	Technical and Professional Writing	
PERF 407	Performing Literature	
Select one of the following:		3
MATH 140	Mathematics for Business and Social Sciences	
MATH 142	Business Calculus	
MATH 147	Calculus I for Biological Sciences	
MATH 148	Calculus II for Biological Sciences	
MATH 151	Engineering Mathematics I	
MATH 152	Engineering Mathematics II	
MATH 168	Finite Mathematics	
MATH 171	Calculus I	
MATH 172	Calculus II	
PHIL 240	Introduction to Logic	
Creative arts ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts</a> )		3

**Semester Credit Hours** **13**

### Second Year

Fall		
POLS 206	American National Government	3
CHEM 119	Fundamentals of Chemistry I	4
American history ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> )		3
General electives <sup>1</sup>		6
<b>Semester Credit Hours</b>		<b>16</b>
<b>Spring</b>		
POLS 207	State and Local Government	3
Language, philosophy and culture ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture</a> )		3
American history ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> )		3

General electives <sup>1</sup> 6**Semester Credit Hours 15****Third Year****Fall**

PHLT 302	Foundations of Public Health	3
PHLT 303	Social Context of Population Health	3
PHLT 304	Biological Basis of Public Health	3
PHLT 310	Public Health Writing	1
PHLT 313	Health Care and Public Health System	3
PHLT 314	Public Health Data Management and Assessment I	2

**Semester Credit Hours 15****Spring**

PHLT 305	Epidemiology in Public Health	3
PHLT 309	Population Health Promotion	3
PHLT 311	Narrative Approach to Public Health	1
PHLT 330	The Environment and Public Health	3
PHLT 412	Health Advocacy and Policy	3
PHLT 315	Public Health Data Management and Assessment II	2

**Semester Credit Hours 15****Fourth Year****Fall**

PHLT 410	Public Health Communication	3
PHLT 411	Project Management in Public Health	3
PHLT 441	Strategies for Population Health Improvement	3

**BSPH Directed Electives <sup>2</sup>**

Select 9 hours from the following: 9

BESC 314	Pathogens, the Environment and Society
BESC 367	U.S. Environmental Regulations
BESC 401	Bioenvironmental Microbiology
BICH 410	Comprehensive Biochemistry I
BICH 411	Comprehensive Biochemistry II
BICH 412	Biochemistry Laboratory I
CHEM 227	Organic Chemistry I
CHEM 237	Organic Chemistry Laboratory
CHEM 228	Organic Chemistry II
CHEM 238	Organic Chemistry Laboratory
ENTO 210	Global Public Health Entomology
ENTO 423	Medical Entomology
ENTO 431/ FIVS 431	The Science of Forensic Entomology
ENTO 432/ FIVS 432	Applied Forensic Entomology
GENE 301	Comprehensive Genetics
GENE 312	Comprehensive Genetics Laboratory
GENE 320/ BIMS 320	Biomedical Genetics
PHLT 306	Border Health
PHLT 308	Comparative Global Health Systems
PHLT 331	Occupational Safety and Health I
PHLT 332	Occupational Safety and Health II

PHLT 333 Accident Investigation

PHLT 334 Fire Safety and Workplace Hazards

PHLT 335 Hazardous Materials

PHLT 413 Public Health Informatics

PHLT 414 Applications of Epidemiology in Public Health

PHLT 416 Public Health Leadership and Ethics

PHLT 432 Human Factors and Ergonomic Health and Safety

PHLT 433 Industrial Inspections and Audit Techniques

PHLT 434 Project Cost Benefit and Economics

PHLT 484 Public Health Studies Field Experience

PHLT 485 Directed Studies

PHLT 489 Special Topics In...

PHLT 491 Research

URPN 370 Health Systems Planning

URPN 371 Environmental Health Planning and Policy

VIBS 401 Developmental Neurotoxicology

VIBS 407/  
NRSC 407 Core Ideas in Neuroscience

VIBS 413 Introduction to Epidemiology

VIBS 420 Computer Applications in Public Health Research

VTPB 408 Clinical Microbiology

VTPB 409 Introduction to Immunology

VTPB 438 Biomedical Virology

VTPB 487/  
BIOL 487 Biomedical Parasitology**Semester Credit Hours 18****Spring**

PHLT 307 Public Health in the Global Context 3

PHLT 415 Emergency Management in Public Health 3

PHLT 445 Applications of Public Health 3

**BSPH Directed Electives <sup>2</sup>**

Select 6 hours from the following: 6

BESC 314	Pathogens, the Environment and Society
BESC 367	U.S. Environmental Regulations
BESC 401	Bioenvironmental Microbiology
BICH 410	Comprehensive Biochemistry I
BICH 411	Comprehensive Biochemistry II
BICH 412	Biochemistry Laboratory I
CHEM 227	Organic Chemistry I
CHEM 237	Organic Chemistry Laboratory
CHEM 228	Organic Chemistry II
CHEM 238	Organic Chemistry Laboratory
ENTO 210	Global Public Health Entomology
ENTO 423	Medical Entomology
ENTO 431/ FIVS 431	The Science of Forensic Entomology
ENTO 432/ FIVS 432	Applied Forensic Entomology
GENE 301	Comprehensive Genetics

GENE 312	Comprehensive Genetics Laboratory
GENE 320/ BIMS 320	Biomedical Genetics
PHLT 333	Accident Investigation
PHLT 306	Border Health
PHLT 308	Comparative Global Health Systems
PHLT 331	Occupational Safety and Health I
PHLT 332	Occupational Safety and Health II
PHLT 333	Accident Investigation
PHLT 334	Fire Safety and Workplace Hazards
PHLT 335	Hazardous Materials
PHLT 413	Public Health Informatics
PHLT 414	Applications of Epidemiology in Public Health
PHLT 416	Public Health Leadership and Ethics
PHLT 432	Human Factors and Ergonomic Health and Safety
PHLT 485	Directed Studies
PHLT 433	Industrial Inspections and Audit Techniques
PHLT 434	Project Cost Benefit and Economics
PHLT 484	Public Health Studies Field Experience
PHLT 485	Directed Studies
PHLT 489	Special Topics In...
PHLT 491	Research
URPN 370	Health Systems Planning
URPN 371	Environmental Health Planning and Policy
VIBS 401	Developmental Neurotoxicology
VIBS 407/ NRSC 407	Core Ideas in Neuroscience
VIBS 413	Introduction to Epidemiology
VIBS 420	Computer Applications in Public Health Research
VTPB 408	Clinical Microbiology
VTPB 409	Introduction to Immunology
VTPB 438	Biomedical Virology
VTPB 487/ BIOL 487	Biomedical Parasitology
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<b>Semester Credit Hours</b>	
<b>15</b>	
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<b>Total Semester Credit Hours</b>	
<b>120</b>	

<sup>1</sup> Chosen in consultation with BSPH academic advisor.

<sup>2</sup> BSPH Directed Electives: courses that constitute the major are those offered by the School of Public Health and those approved for public health studies electives. Additional courses may be available. Students must check with their academic advisor.

Approval of degree plan does not guarantee access to courses. Students must satisfy prerequisites, and some course (writing intensive classes included) are available to majors only. It is the responsibility of the student to ascertain whether there are any restrictions or prerequisites for courses in their degree plan.