

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 (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences)		3
Semester Credit Hours		13

Spring

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 (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts)		3

Semester Credit Hours **13**

Second Year

Fall	Semester Credit Hours
POLS 206 American National Government	3
CHEM 119 Fundamentals of Chemistry I	4
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)	3
General electives ¹	6

Semester Credit Hours **16**

Spring

POLS 207	State and Local Government	3
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture)		3
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)		3

General electives ¹	6	PHLT 333	Accident Investigation	
Semester Credit Hours	15	PHLT 334	Fire Safety and Workplace Hazards	
Third Year		PHLT 335	Hazardous Materials	
Fall		PHLT 413	Public Health Informatics	
PHLT 302	Foundations of Public Health	3	PHLT 414	Applications of Epidemiology in Public Health
PHLT 303	Social Context of Population Health	3	PHLT 416	Public Health Leadership and Ethics
PHLT 304	Biological Basis of Public Health	3	PHLT 432	Human Factors and Ergonomic Health and Safety
PHLT 310	Public Health Writing	1	PHLT 433	Industrial Inspections and Audit Techniques
PHLT 313	Health Care and Public Health System	3	PHLT 434	Project Cost Benefit and Economics
PHLT 314	Public Health Data Management and Assessment I	2	PHLT 484	Public Health Studies Field Experience
Semester Credit Hours	15	PHLT 485	Directed Studies	
Spring		PHLT 489	Special Topics In...	
PHLT 305	Epidemiology in Public Health	3	PHLT 491	Research
PHLT 309	Population Health Promotion	3	URPN 370	Health Systems Planning
PHLT 311	Narrative Approach to Public Health	1	URPN 371	Environmental Health Planning and Policy
PHLT 330	The Environment and Public Health	3	VIBS 401	Developmental Neurotoxicology
PHLT 412	Health Advocacy and Policy	3	VIBS 407/ NRSC 407	Core Ideas in Neuroscience
PHLT 315	Public Health Data Management and Assessment II	2	VIBS 413	Introduction to Epidemiology
Semester Credit Hours	15	VIBS 420	Computer Applications in Public Health Research	
Fourth Year		VTPB 408	Clinical Microbiology	
Fall		VTPB 409	Introduction to Immunology	
PHLT 410	Public Health Communication	3	VTPB 438	Biomedical Virology
PHLT 411	Project Management in Public Health	3	VTPB 487/ BIOL 487	Biomedical Parasitology
PHLT 441	Strategies for Population Health Improvement	3	Semester Credit Hours	18
BSPH Directed Electives ²		Spring		
Select 9 hours from the following:	9	PHLT 307	Public Health in the Global Context	3
BESC 314	Pathogens, the Environment and Society	PHLT 415	Emergency Management in Public Health	3
BESC 367	U.S. Environmental Regulations	PHLT 445	Applications of Public Health	3
BESC 401	Bioenvironmental Microbiology	BSPH Directed Electives ²		
BICH 410	Comprehensive Biochemistry I	Select 6 hours from the following:	6	
BICH 411	Comprehensive Biochemistry II	BESC 314	Pathogens, the Environment and Society	
BICH 412	Biochemistry Laboratory I	BESC 367	U.S. Environmental Regulations	
CHEM 227	Organic Chemistry I	BESC 401	Bioenvironmental Microbiology	
CHEM 237	Organic Chemistry Laboratory	BICH 410	Comprehensive Biochemistry I	
CHEM 228	Organic Chemistry II	BICH 411	Comprehensive Biochemistry II	
CHEM 238	Organic Chemistry Laboratory	BICH 412	Biochemistry Laboratory I	
ENTO 210	Global Public Health Entomology	CHEM 227	Organic Chemistry I	
ENTO 423	Medical Entomology	CHEM 237	Organic Chemistry Laboratory	
ENTO 431/ FIVS 431	The Science of Forensic Entomology	CHEM 228	Organic Chemistry II	
ENTO 432/ FIVS 432	Applied Forensic Entomology	CHEM 238	Organic Chemistry Laboratory	
GENE 301	Comprehensive Genetics	ENTO 210	Global Public Health Entomology	
GENE 312	Comprehensive Genetics Laboratory	ENTO 423	Medical Entomology	
GENE 320/ BIMS 320	Biomedical Genetics	ENTO 431/ FIVS 431	The Science of Forensic Entomology	
PHLT 306	Border Health	ENTO 432/ FIVS 432	Applied Forensic Entomology	
PHLT 308	Comparative Global Health Systems	GENE 301	Comprehensive Genetics	
PHLT 331	Occupational Safety and Health I			
PHLT 332	Occupational Safety and Health II			

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	
Semester Credit Hours		15
Total Semester Credit Hours		120

¹ Chosen in consultation with BSPH academic advisor.

² 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.