



Undergraduate Public Health Learning Outcomes

FINAL Model Version 1.0

July 14, 2011



Undergraduate
Public Health
Learning Outcomes
Model

In collaboration with the Association of American Colleges and Universities, Association for Prevention Teaching and Research, and Centers for Disease Control and Prevention, the Association of Schools of Public Health¹ presents this model for facilitating introducing public health to undergraduate students in two- and four-year colleges and universities. Model Version 1.0 represents public health knowledge, concepts, and skills that can be integrated into curricular and co-curricular undergraduate educational opportunities to enable students to become more active participants in their own and their community's health.

Inspiration for the model came from the Institute of Medicine's recommendation for an educated citizenry, based on access to public health education by all undergraduates, and a number of key trends and issues in the field. **The list is neither comprehensive nor prescriptive, but illustrative of the myriad ways public health contributes to quality of life locally and globally.**

Modeled after the Association of American Colleges and Universities' [Liberal Education and America's Promise \(LEAP\) Framework](#), Domains 1, 2 and 3 include recommended learning outcomes; Domain 4 provides examples of incorporating the learning outcomes into: general education or discipline-specific courses, co-curricular collaborations, and experiential learning opportunities.

Target Audience

All undergraduate students at institutions of higher education

Goal of the Model

Express what every undergraduate, as an educated member of society, should know and be able to do to promote population health both locally and globally.

Partners

Association of American Colleges and Universities (AAC&U)
Association for Prevention Teaching and Research (APTR)
Centers for Disease Control and Prevention (CDC)

This project was partially supported under a cooperative agreement from the Centers for Disease Control and Prevention (CDC) through the Association of Schools of Public Health (ASPH) Grant Number CD300430.

¹ The Association of Schools and Programs of Public Health (ASPPH) is the voice of accredited academic public health, representing schools and programs accredited by the Council on Education for Public Health (CEPH). ASPPH was established August 1, 2013. This report was published by ASPPH's predecessor, ASPH (Association of Schools of Public Health).

**DOMAIN 1: KNOWLEDGE OF HUMAN CULTURES AND THE
PHYSICAL AND NATURAL WORLD AS IT RELATES TO
INDIVIDUAL AND POPULATION HEALTH**

Through study in the sciences and mathematics, social sciences,
humanities, histories, languages, and the arts

Focused by engagement with big questions, both contemporary and enduring

As educated members of society, all undergraduates should be able to...

- 1.1 Define public health and related roles and responsibilities of government, non-government agencies, and private organizations.
- 1.2 Describe risk factors and modes of transmission for infectious and chronic diseases and how these diseases affect both personal and population health.
- 1.3 Describe the reciprocal relationships among literature, the arts, and public health.
- 1.4 List the leading causes of mortality, morbidity, and health disparities among local, regional, and global populations.
- 1.5 Discuss the role of gender, race, ethnicity, and other evolving demographics in affecting population health.
- 1.6 Discuss major local, national, and global health challenges.
- 1.7 Explain how the organizational structure, financing, and delivery of personal health care and public health services impact population health.
- 1.8 Explain the influence that science and technology have on individual and population health.
- 1.9 Outline approaches for assessing and controlling environmental hazards that affect community health.
- 1.10 Assess the values and perspectives of diverse individuals, communities, and cultures and their influence on health behaviors, choices, and practices.
- 1.11 Appreciate the role of community collaborations in promoting population health.
- 1.12 Recognize the importance of key events and milestones in the history and development of the field of public health.
- 1.13 Value the relationship between human rights and health.

These examples highlight potential learning methods (one example provided for each learning outcome) for incorporating the learning outcomes into: general education or discipline-specific courses, experiential learning opportunities, and co-curricular collaborations. See page 1 for more information on the model.

DOMAIN 2: INTELLECTUAL AND PRACTICAL SKILLS

Inquiry and analysis
Critical and creative thinking
Written and oral communication
Quantitative literacy
Information literacy
Teamwork and problem solving

Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance

As educated members of society, all undergraduates should be able to...

- 2.1 Describe how the methods of epidemiology and surveillance are used to safeguard the population's health.
- 2.2 Identify scientific data, including tools of informatics, and other information for assessing the well-being of a community.
- 2.3 Discuss the interconnectedness among the physical, social, and environmental aspects of community health.
- 2.4 Communicate health information to a wide range of audiences through an array of media.
- 2.5 Conduct a literature search on a health issue using a variety of academic and public resources.
- 2.6 Engage in collaborative and interdisciplinary approaches and teamwork for improving population health.
- 2.7 Analyze alternative viewpoints regarding a health topic.
- 2.8 Assess the source and quality of health information and data, as related to individual and community health.
- 2.9 Appreciate the multiple determinants of health.
- 2.10 Recognize the impact of policies, laws, and legislation on both individual and population health.

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DOMAIN 3: PERSONAL AND SOCIAL RESPONSIBILITY

Civic knowledge and engagement—local and global
Intercultural knowledge and competence
Ethical reasoning and action
Foundations and skills for lifelong learning

Anchored through active involvement with diverse communities
and real-world challenges

As educated members of society, all undergraduates should be able to...

- 3.1 Identify stakeholders who influence health programs and interventions.
- 3.2 Discuss the role of community engagement in promoting population health and social justice.
- 3.3 Outline individual and community preparedness considerations regarding health emergencies and public disasters.
- 3.4 Collaborate with others from diverse backgrounds in addressing health disparities and inequities.
- 3.5 Participate in the political process to improve health, social justice, and equity.
- 3.6 Analyze ethical concerns and conflicts of interest that arise in the field of public health.
- 3.7 Examine the fundamental right to health and health services.
- 3.8 Advocate for evidence-based social changes that improve the health of individuals and communities.
- 3.9 Champion the role of prevention in promoting a healthy community.
- 3.10 Endorse lifestyle behaviors that promote individual and population health and well-being.
- 3.11 Value multicultural perspectives and sensitivities on health.

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DOMAIN 4: INTEGRATIVE AND APPLIED LEARNING

Synthesis and advanced accomplishment
across general and specialized studies

Demonstrated through the application of knowledge, skills, and
responsibilities to new settings and complex problems

Examples of Integrative and Applied Learning

- 1.1 Define public health and related roles and responsibilities of government, non-government agencies, and private organizations.
Case study depicting the actions of a governmental agency, a non-governmental organization, and a foundation in solving the mystery of widespread fish deaths in local lakes.
- 1.2 Describe risk factors and modes of transmission for infectious and chronic diseases and how these diseases affect both personal and population health.
Photovoice assignment with local community seniors' centers capturing the key cultural, environmental, and economic assets and detractors related to cardiovascular disease in diverse populations.
- 1.3 Describe the reciprocal relationships among literature, the arts, and public health.
“Literature, Arts, and Public Health” course with faculty from English, History, Art History, and Public Health combining literary and historical readings, works of famous photographers, and discussions of important public health topics to: 1) increase awareness of multidisciplinary approaches, and 2) influence health behaviors and improvement.
- 1.4 List the leading causes of mortality, morbidity, and health disparities among local, regional, and global populations.
Team construction of questions and answers for a class “Jeopardy game” simulation regarding population group differences in morbidity, mortality, and health disparities.
- 1.5 Discuss the role of gender, race, ethnicity, and other evolving demographics in affecting population health.
Interactive seminar with students from various departments across campus (e.g. Women’s Studies, Ethnic Studies, Public Health) examining health disparities.

- 1.6 Discuss major local, national, and global health challenges.
Research project and presentation on findings to classmates regarding different health issues and problems confronting the population(s) of an assigned country, including the role of governmental and nongovernmental health institutions in affecting the population's health.
- 1.7 Explain how the organizational structure, financing, and delivery of personal health care and public health services impact population health.
Comparison of changes in the Centers for Disease Control and Prevention operating budget across ten years with changes in the top three disease rates at national and local levels. (<http://www.cdc.gov/fmo/fmofybudget.htm>)
- 1.8 Explain the influence that science and technology have on individual and population health.
Field trip to a health care entity for a presentation and discussion regarding emerging technologies, e.g., bioengineering and sports injuries, eye diseases and diabetes research, hearing institute and cochlear implants, radiation oncology and cancer detection.
- 1.9 Outline approaches for assessing and controlling environmental hazards that affect community health.
Guest speaker presentation and discussion by an environmental health/hazards specialist or engineering waste management representative, followed by a written report addressing control methods for a specific environmental hazard.
- 1.10 Assess the values and perspectives of diverse individuals, communities, and cultures and their influence on health behaviors, choices, and practices.
Book club/course readings about how different cultures adopt health practices and attitudes regarding formal and informal health care services, combined with a discussion regarding the interaction of these differences in determining health population outcomes and health status.
- 1.11 Appreciate the role of community collaborations in promoting population health.
Team-based service learning project with a local health department regarding the development of a campaign promoting smoking cessation.
- 1.12 Recognize the importance of key events and milestones in the history and development of the field of public health.
Capstone course covering key public health milestones and breakthroughs, e.g. tracing of cholera to the public water supplies, eradication of smallpox, discovery of penicillin.

- 1.13 Value the relationship between human rights and health.
Comparative analysis of the impact of recent social injustices on population health in two countries.
- 2.1 Describe how the methods of epidemiology and surveillance are used to safeguard the population's health.
Presentation and discussion session directed by a state health department epidemiologist outlining the roles of epidemiology and surveillance in the state's foodborne disease control program.
- 2.2 Identify scientific data, including tools of informatics, and other information for assessing the well-being of a community.
Collaborative project in a local health department planning for a community nutrition survey.
- 2.3 Discuss the interconnectedness among the physical, social, and environmental aspects of community health.
Creation of systems-based diagrams regarding population flows for a particular disease in relation to the environment, different stakeholders, and the population's overall health status.
- 2.4 Communicate health information to a wide range of audiences through an array of media.
Joint course exercise with journalism students in the development of a multi-media public information campaign targeted at senior citizens promoting influenza vaccination.
- 2.5 Conduct a literature search on a health issue using a variety of academic and public resources.
Development of a paper, including references and related resources, regarding the current issues, related trends, and potential interventions for an assigned public health challenge.
- 2.6 Engage in collaborative and interdisciplinary approaches and teamwork for improving population health.
Joint course exercise with urban planning, architecture and/or public policy students to plan a city center facilitating resident walking and cycling.
- 2.7 Analyze alternative viewpoints regarding a health topic.
Team creation of a short YouTube video examining three viewpoints regarding a proposal to exclude all trans-fats from items served at local restaurants.

- 2.8 Assess the source and quality of health information and data, as related to individual and community health.
Team development of a presentation regarding outcomes from a community health assessment, including slides and graphics.
- 2.9 Appreciate the multiple determinants of health.
Multidisciplinary learning community of students from the biological, social, behavioral, physical, and natural sciences; business; architecture; urban planning; and engineering exploring the epidemic of obesity locally and globally.
- 2.10 Recognize the impact of policies, laws, and legislation on both individual and population health.
Collaborative team project investigating state laws and campus policies related to mandatory immunizations of students living in campus housing, followed by a mock campus forum with one team arguing the case for an individual student's right to refuse immunization, while the other team presents the university's responsibility to minimize health risks for the campus population.
- 3.1 Identify stakeholders who influence health programs and interventions.
Simulated town hall meeting regarding community health challenges with teams role-playing key stakeholders, e.g., city council, health department, local hospital.
- 3.2 Discuss the role of community engagement in promoting population health and social justice.
Participation/attendance at a community health fair promoting the benefits of good nutrition and increased physical activity, with subsequent reporting on a summary of observations and perspectives.
- 3.3 Outline individual and community preparedness considerations regarding health emergencies and public disasters.
Interactive seminar with a local disaster preparedness officer sharing community disaster management planning initiatives and protocols.
- 3.4 Collaborate with others from diverse backgrounds in addressing health disparities and inequities.
Service-learning project assisting with the improvement of access to care or delivery of existing services for underserved members of a specific race/ethnic population, including a presentation of observations and recommendations to classmates.

- 3.5 Participate in the political process to improve health, social justice, and equity.
Preparation of letters to influence elected officials' decision-making regarding a selected or assigned public health issue.
- 3.6 Analyze ethical concerns and conflicts of interest that arise in the field of public health.
Case study on fluoridation of the water supply.
- 3.7 Examine the fundamental right to health and health services.
Team debate regarding the 'right' of all people to access quality health care.
- 3.8 Advocate for evidence-based social changes that improve the health of individuals and communities.
Collaboration with communication department students and faculty on an "op-ed" media submission promoting hiking and biking trail development in a community.
- 3.9 Champion the role of prevention in promoting a healthy community.
Internship project with a local dental association focused on oral cancer risk reduction strategies.
- 3.10 Endorse lifestyle behaviors that promote individual and population health and well-being.
Collaboration with health behavior and education specialists in the development of a community campaign promoting healthy eating and exercise for addressing obesity among residents.
- 3.11 Value multicultural perspectives and sensitivities on health.
Role-playing exercises/scenarios with language studies/multicultural course instructors regarding provision of immunization services to diverse cultural groups.

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