The Public Health major comprises the following concentrations:

• The Biostatistics concentration prepares students in the quantitative science of health data collection, storage, retrieval, analysis and interpretation. Graduates are equipped to use statistical methods to design and analyze health-related surveys and experiments for the purpose of improving health. The college’s faculty research interests include applying biostatistical analysis to better understand critical health problems such as adolescent substance abuse, HIV/AIDS, cancer and Alzheimer’s disease. Graduates in biostatistics are in demand at hospitals, pharmaceutical companies, state and local health departments, federal health agencies and biotechnology companies to analyze the effectiveness of new drugs and interventions, identify risk factors for disease and develop effective prevention strategies.

• The Environmental Health Sciences concentration is designed to help students understand how environmental factors including biological, physical and chemical factors affect the health of a population; and gain knowledge and skills to develop practical strategies for mitigating the effects of harmful environmental hazards. Graduates learn how to conduct laboratory analysis of environmental contaminants, develop plans to prepare communities to respond to man-made and natural disasters, incorporate health promoting principles into urban design, and develop safety plans for companies. Students benefit from the college’s faculty research expertise in bio-preparedness, microbiology and occupational health and safety. Career opportunities in environmental health sciences include positions in research and clinical laboratories, environmental protection agencies, manufacturing companies, emergency management agencies and state and local health departments.

• The Epidemiology concentration prepares students to analyze the distribution and determinants of disease, disabilities and death in populations. Graduates are able to apply quantitative and qualitative methods to investigate disease outbreaks, determine causal relationships between environmental and biological factors, and conduct studies to project health trends in populations. Students in this specialization benefit from public health faculty research agendas in bio-preparedness, public health surveillance systems, chronic disease, cancer and infectious disease epidemiology. Career opportunities for graduates include research positions in universities, medical schools and pharmaceutical companies; disease prevention specialists in hospitals; and surveillance managers in state and local health departments.

• The Health Policy and Management concentration prepares students to address public health risks and develop effective health services delivery models. It is an interdisciplinary program that incorporates health services research, health policy analysis and health care planning and management. Given the active research of the college’s faculty in identifying service gaps and in developing evidence-based practices and policy analysis, students emerge with strong skills in health services management, alternative models of service financing and strategies for improving services. Career opportunities for graduates include administrative and management positions in hospitals, clinics, state and local health departments, nursing homes and mental health facilities; policy analyst positions in health planning organizations and governmental agencies; and planning and management positions in health maintenance organizations and health insurance companies.

• The Social and Behavioral Sciences concentration provides students with an interdisciplinary understanding of the theoretical basis of health behavior in populations across the life course and how to apply theoretical principles to design effective health behavior management strategies. Graduates are able to design and evaluate public health interventions intended to improve health for families, workplaces, communities, and other settings. The active research of the college’s faculty, particularly in the areas of childhood obesity, violence and injury prevention, substance abuse prevention, and chronic disease prevention, provides students the opportunity to work on large-scale externally funded prevention research. Students are prepared for careers in health promotion; program design and evaluation; and prevention program development for state and local health departments, workplace health promotion programs, hospitals, international health agencies, mental health centers and non-profit organizations.

**Fully Offered At:**

• Online (Health Policy and Management and Social and Behavioral Sciences concentrations only)
• Kent Campus
• Trumbull Campus (Health Policy and Management concentration only)
• Regional Academic Center in Twinsburg (Health Policy and Management concentration only)

**Accreditation**

The M.P.H. degree in Public Health is accredited by the Council on Education for Public Health (CEPH).

**Admission Requirements**

- Bachelor's degree from an accredited college or university for unconditional admission
- Minimum 3.000 undergraduate GPA on a 4.000 point scale for unconditional admission
- Official transcript(s)
- GRE scores or other standardized graduate admission exam (GMAT, MCAT, LSAT or PCAT)$^1$
- Goal statement
- Three letters of recommendation
• English Language Proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning one of the following:
  • Minimum 550 TOEFL PBT score - paper-based version
  • Minimum 79 TOEFL IBT - Internet-based version
  • Minimum 77 MELAB score
  • Minimum 6.5 IELTS score
  • Minimum 58 PTE score

For more information about graduate admission, please visit the Graduate Studies website. For more information on international admission, visit the Office of Global Education’s admission website.

1 GRE scores may be waived, as determined by graduate coordinator, using program criteria.

Program Learning Outcomes
Graduates of this program will be able to:

1. Explain public health history, philosophy and values
2. Identify the core functions of public health and the 10 Essential Services
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
6. Explain the critical importance of evidence in advancing public health knowledge
7. Explain effects of environmental factors on a population's health
8. Explain biological and genetic factors that affect a population's health
9. Explain behavioral and psychological factors that affect a population's health
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
11. Explain how globalization affects global burdens of disease
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)
13. Apply epidemiological methods to the breadth of settings and situations in public health practice
14. Select quantitative and qualitative data collection methods appropriate for a given public health context
15. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
16. Interpret results of data analysis for public health research, policy or practice
17. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
18. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels
19. Assess population needs, assets and capacities that affect communities' health
20. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
21. Design a population-based policy, program, project or intervention
22. Explain basic principles and tools of budget and resource management
23. Select methods to evaluate public health programs
24. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
25. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
26. Advocate for political, social or economic policies and programs that will improve health in diverse populations
27. Evaluate policies for their impact on public health and health equity
28. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
29. Apply negotiation and mediation skills to address organizational or community challenges
30. Select communication strategies for different audiences and sectors
31. Communicate audience-appropriate public health content, both in writing and through oral presentation
32. Describe the importance of cultural competence in communicating public health content
33. Perform effectively on interprofessional teams
34. Apply systems thinking tools to a public health issue

Program Requirements
Major Requirement

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>BST 52019</td>
<td>BIOSTATISTICS IN PUBLIC HEALTH</td>
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<tr>
<td>EHS 52018</td>
<td>ENVIRONMENTAL HEALTH CONCEPTS IN PUBLIC HEALTH</td>
<td>3</td>
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<td>EPI 52017</td>
<td>FUNDAMENTALS OF PUBLIC HEALTH EPIDEMIOLOGY</td>
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<td>HPM 52016</td>
<td>PUBLIC HEALTH ADMINISTRATION</td>
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<tr>
<td>HPM 53010</td>
<td>COMMUNITY HEALTH NEEDS ASSESSMENT</td>
<td>3</td>
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<tr>
<td>SBS 54634</td>
<td>SOCIAL DETERMINANTS OF HEALTH BEHAVIORS</td>
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Advisor Approved Electives, choose from the following: 6

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<tr>
<td>BST 50196</td>
<td>INDIVIDUAL INVESTIGATION IN BIOSTATISTICS</td>
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<tr>
<td>BST 60195</td>
<td>SPECIAL TOPICS IN BIOSTATISTICS</td>
</tr>
<tr>
<td>BST 63012</td>
<td>SURVIVAL ANALYSIS IN PUBLIC HEALTH</td>
</tr>
<tr>
<td>BST 63013</td>
<td>EXPERIMENTAL DESIGNS IN PUBLIC HEALTH RESEARCH</td>
</tr>
<tr>
<td>BST 63014</td>
<td>APPLIED REGRESSION ANALYSIS OF PUBLIC HEALTH DATA</td>
</tr>
<tr>
<td>EHS 50196</td>
<td>INDIVIDUAL INVESTIGATION IN ENVIRONMENTAL HEALTH SCIENCES</td>
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<tr>
<td>EHS 53009</td>
<td>EMERGING ENVIRONMENTAL HEALTH ISSUES AND RESPONSE</td>
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<td>EHS 53012</td>
<td>OCCUPATIONAL SAFETY AND HEALTH</td>
</tr>
<tr>
<td>EHS 60195</td>
<td>SPECIAL TOPICS IN ENVIRONMENTAL HEALTH SCIENCES</td>
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<tr>
<td>EHS 63010</td>
<td>APPLIED RISK ASSESSMENT</td>
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EHS 63011 APPLICATION OF RISK ANALYSIS IN ENVIRONMENTAL HEALTH
EPI 50013 CLINICAL EPIDEMIOLOGY BASICS
EPI 50014 CLINICAL TRIALS MANAGEMENT
EPI 50015 SCIENTIFIC WRITING FOR CLINICAL RESEARCH
EPI 50018 REGULATORY AFFAIRS IN CLINICAL RESEARCH
EPI 50196 INDIVIDUAL INVESTIGATION IN EPIDEMIOLOGY
EPI 60192 PRACTICUM EXPERIENCE IN BIOSTATISTICS 6
EPI 63012 SURVIVAL ANALYSIS IN PUBLIC HEALTH 3
EPI 63013 EXPERIMENTAL DESIGNS IN PUBLIC HEALTH RESEARCH 3
EPI 63014 APPLIED REGRESSION ANALYSIS OF PUBLIC HEALTH DATA 3
EPI 63016 PRINCIPLES OF EPIDEMIOLOGIC RESEARCH 3
EPI 63034 LONGITUDINAL DATA ANALYSIS 3

Minimum Total Credit Hours:

Environmental Health Sciences Concentration Requirements
[MPH-EHS]

Code Title Credit Hours
EHS 60192 PRACTICUM EXPERIENCE IN ENVIRONMENTAL HEALTH SCIENCES 6
EHS 60193 PRACTICUM EXPERIENCE IN ENVIRONMENTAL HEALTH SCIENCES 3
EHS 60194 PRACTICUM EXPERIENCE IN ENVIRONMENTAL HEALTH SCIENCES 3
EHS 60195 PRACTICUM EXPERIENCE IN ENVIRONMENTAL HEALTH SCIENCES 3

Environmental Health Electives, choose from the following: 15
EHS 50109 LABORATORY SAFETY AND HYGIENE 3
EHS 53009 EMERGING ENVIRONMENTAL HEALTH ISSUES AND RESPONSE 3
EHS 63010 APPLIED RISK ASSESSMENT 3
EHS 63011 APPLICATION OF RISK ANALYSIS IN ENVIRONMENTAL HEALTH 3

Minimum Total Credit Hours: 21

Epidemiology Concentration Requirements
[MPH-EPI]

Code Title Credit Hours
BST 63012 SURVIVAL ANALYSIS IN PUBLIC HEALTH 3
BST 63014 APPLIED REGRESSION ANALYSIS OF PUBLIC HEALTH DATA 3
EPI 60192 PRACTICUM EXPERIENCE IN EPIDEMIOLOGY 6
EPI 63014 EPIDEMIOLOGY OF CHRONIC DISEASES 3
EPI 63015 EPIDEMIOLOGY OF INFECTIOUS DISEASES 3
EPI 63016 PRINCIPLES OF EPIDEMIOLOGIC RESEARCH 3

Minimum Total Credit Hours: 21

Health Policy and Management Concentration Requirements
[MPH-HPM]

Code Title Credit Hours
HPM 53003 HEALTH CARE SYSTEMS 3
HPM 53004 PUBLIC HEALTH POLICY, LAW AND ETHICS 3
HPM 53005 FINANCIAL MANAGEMENT FOR PUBLIC HEALTH ORGANIZATIONS 3
HPM 53006 COST BENEFIT ANALYSIS IN PUBLIC HEALTH PROGRAMS 3

Minimum Total Credit Hours: 21

Concentrations

Choose from the following: 21
Biostatistics
Epidemiology
Health Policy and Management
Social and Behavioral Sciences

Biostatistics Concentration Requirements
[MPH-BST]

Code Title Credit Hours
Concentration Requirements

Environmental Health Sciences Concentration Requirements
[MPH-EHS]

Code Title Credit Hours
Concentration Requirements

Epidemiology Concentration Requirements
[MPH-EPI]

Code Title Credit Hours
Concentration Requirements

Health Policy and Management Concentration Requirements
[MPH-HPM]

Code Title Credit Hours
Concentration Requirements
Social and Behavioral Sciences Concentration Requirements [MPH-SBS]

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<tr>
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<tr>
<td>HPM 53007</td>
<td>PUBLIC HEALTH PROGRAMS: PLANNING, IMPLEMENTATION AND EVALUATION</td>
<td>3</td>
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<tr>
<td>SBS 50002</td>
<td>QUANTITATIVE METHODS IN SOCIAL AND BEHAVIORAL SCIENCES</td>
<td>3</td>
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<tr>
<td>SBS 50020</td>
<td>SOCIAL AND BEHAVIORAL SCIENCE THEORIES</td>
<td>3</td>
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<tr>
<td>SBS 50030</td>
<td>SEMINAR IN SOCIAL AND BEHAVIOR SCIENCES</td>
<td>3</td>
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<tr>
<td>SBS 5008</td>
<td>GRANT WRITING IN SOCIAL AND BEHAVIORAL SCIENCES</td>
<td>3</td>
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<tr>
<td>SBS 60192</td>
<td>PRACTICUM EXPERIENCE IN SOCIAL AND BEHAVIORAL SCIENCES</td>
<td>6</td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 21

Graduation Requirements
1. 300 hours of practicum placement at an approved public health agency, under the guidance of a qualified preceptor
2. A final portfolio/report and a seminar presentation integrating theory and practice
3. A comprehensive written exam