

# PRE-PUBLIC HEALTH

Public health is a multidisciplinary field that addresses health challenges and promotes the well-being of communities and populations. Public health professionals focus on a wide range of health issues, from infectious diseases to environmental health, health disparities, and global health challenges. Specializations in the field of public health include epidemiology, biostatistics, environmental health, health policy, and health education. The Pre-Public Health program at Wayne State is a pathway to help you build a foundation in various subjects related to public health and meet the prerequisites needed for graduate work in public health. It is recommended that you choose a major and coursework to support the specialization in public health that you'd like to pursue in graduate school. Wayne State also offers a minor in Public and Global Health, which is recommended to accompany your chosen major.

## fast facts

### Recommended majors:

Exercise Science (B.A. or B.S.)  
 Life Sciences/Biology (B.A. or B.S.)  
 Mathematics/Applied Math (B.S.)  
 Mathematics/Pure Math (B.S.)  
 One Health Studies (B.A. or B.S.)  
 Sociology (B.A. or B.S.)  
 Social Sciences/Geography (B.A. or B.S.)  
 Social Sciences/Political Science (B.A. or B.S.)

**Departments:** Health, Human Performance, and Sport; Life Sciences; Physical Sciences and Mathematics; History, Political Science, and Geography; Psychology and Sociology

**Schools:** Arts and Humanities; Education and Behavioral Sciences; Science, Health, and Criminal Justice

**Recommended minor:** Public and Global Health

## focus on results

### Skills Learned

- Knowledge of body structure and function
- Health status and risk factor identification
- Fitness appraisal and exercise prescription
- Body composition testing/measurement
- Exercise physiology; strength and conditioning
- Cardiac rehabilitation, exercise prescription
- Research and data analysis
- Kinesiology / biomechanics
- Biological and social determinants of health and disease

### Possible Careers

- Public health project manager
- Community health worker
- Health communications specialist
- Population health manager
- Environmental health director
- Epidemiologist
- Occupational health specialist
- Biosecurity specialist
- Chief medical officer
- Corporate medical director
- Disaster preparedness coordinator

### Types of Employers

- Hospitals and medical clinics
- Businesses and corporations
- City, county, and state governments
- Schools, colleges, and universities
- Federal agencies
- Non-profit organizations
- Labs and research facilities
- Public relations and marketing agencies
- Public health departments

## outside the classroom

### Activities/Opportunities

- Rural Health Opportunities Program (RHOP)
- Service-Learning
- Study Abroad

### Clubs/Organizations

- Biology Club
- Exercise is Medicine Club
- Health Science Club



Visit [www.wsc.edu/clubs](http://www.wsc.edu/clubs) to learn more about clubs and organizations on campus.

The following information is provided to guide you in the pre-professional program described on this sheet. Every effort is made to ensure this information is current, but please be aware that some content may have changed. To develop a plan for choosing a major and registering for courses, please consult the current academic catalog and your advisor.

## Suggested majors for Pre-Public Health

The following majors are recommended for students planning to attend graduate school to earn their Master of Public Health degree. It is also recommended that you complete the minor in Public and Global Health. Additional electives can also be included.

**Life Sciences/Biology (B.A. or B.S.)** — Our Biology program lays the groundwork needed for students entering medical school and provides plenty of time in our biology and research labs.

**Exercise Science (B.A. or B.S.)** — The Exercise Science program can help you understand the human body’s physiological response to exercise, and how physical activity and fitness impact overall health. Exercise Science majors learn to interact with individuals to promote physical fitness and well-being.

**Social Sciences/Geography (B.A. or B.S.)** — The Geography program can provide you with a global perspective, which is relevant for global health studies. You’ll also study geographic information systems (GIS) and mapping, which are used in public health to analyze spatial data and create maps to understand the geographical distribution of health issues, track disease outbreaks, and plan for resource allocation. The Department of History, Politics, and Geography at Wayne State offers a major in Geography, along with minors in Geospatial Technology, and Mapping.

**Mathematics/Applied Math (B.S.) or Mathematics/Pure Math (B.S.)** — Courses in statistics and mathematics will help you develop data analysis and research skills, which is crucial for health research and analysis. Epidemiologists and biostatisticians calculate and analyze data, and mathematical models are used to for public health planning and response. Wayne State offers a variety of courses in math and statistics, including programs in Applied Math, Pure Math, and a Math minor.

**One Health Studies (B.A. or B.S.)** — The One Health Studies major combines an interdisciplinary core of diverse health, environmental, and social science foundations, and allows students to select one of four concentrations. The program equips students with holistic knowledge and skills for diverse professions or post-graduate studies, including human, animal or environmental health sciences, public health, agriculture, wildlife management, social services, law, and public policy.

**Social Sciences/Political Science (B.A. or B.S.)** — Courses in political science, law, and public administration can help you understand policy and administration, which can be essential for creating and enforcing health policies. The Department of History, Politics, and Geography offers a Political Science program, and minors in Public Administration and Pre-Law.

**Sociology (B.A. or B.S.)** — Courses in sociology, psychology, and anthropology program can help you understand the social and cultural factors that influence public health. The Department of Psychology and Sociology offer majors and minors in Psychology and Sociology.

## Sample courses

Students may be advised to take electives from a variety of domain, including the sample courses below. Please consult with your advisor to draft a final plan of study, and be sure to check with your intended medical school to make sure you’re meeting all prerequisite course requirements.

BIO 145 Environmental Studies.....	1
CJA 460 Emergency Management.....	3
CNA 418 Health Communication.....	3
FCS 340 Community Nutrition.....	3
HSC 443 Rural Health Issues.....	1-2
PED 400 Exercise and Clinical Populations.....	3
PGH 200 Intro to Personal, Public, and Global Health.....	3
POS 430 Public Policy.....	3
PSY 345 Health Psychology.....	3

## pre-public health faculty

Visit [www.wsc.edu/health-human-performance-sport-department](http://www.wsc.edu/health-human-performance-sport-department) to learn more about the Department of Health, Human Performance, and Sport.

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