

## Epidemiology

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### Affiliated Faculty

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The Department offers a Graduate Certificate in Epidemiology; a Master of Public Health with a major in Epidemiology; a Master of Public Health with major in Infectious Disease Epidemiology; and a Ph.D. in Public Health with a major in Epidemiology.

## MPH in Epidemiology

The Master of Public Health major in Epidemiology courses prepare students to investigate the distribution of diseases and health conditions in the population, disease outbreaks, and the factors determining the distribution.

### Admission Requirements

Applicants must meet the University's general graduate admission requirements:

1. A Bachelor's degree or equivalent from an accredited college or university or, in the case of foreign students, an institution recognized in its own country as preparing students for further study at the graduate level.
2. A minimum 3.0 GPA on the last 60 undergraduate hours. In addition, applicants are required to submit 1) a current resume; and 2) a written statement of purpose (career goals). Applicants are also required to submit three letters of recommendation.
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. Students with diverse backgrounds are encouraged to apply.
4. Submission of official GRE scores is optional. If a student decides to submit GRE scores, the scores must be less than 5 years old.

### MPH Core Curriculum: (15 credits)

PHC 6000	Epidemiology I: Introduction to Public Health Epidemiology	3
PHC 6052	Biostatistics I	3
PHC 6102	Health Policy in a Global Context	3
PHC 6315	Introduction to Environmental Health Sciences	3
PHC 6410	Health Behavior and Public Health	3

### Epidemiology Core: (15 credits)

PHC 6002	Infectious Disease Epidemiology	3
PHC 6003	Chronic Disease Epidemiology	3
	<b>or</b>	

PHC 6008	Cardiovascular Disease Epidemiology	3
PHC 6013	Epidemiology II: Observational Design	3
PHC 6016	Social Epidemiology	3
	<b>or</b>	
PHC 6441	Epidemiology of Health Disparity	3
PHC 6091	Biostatistics II	3

### Major Courses- Electives: (9 credits) \*

Choose three of the following elective courses:

PHC 6001	Environmental and Occupational Epidemiology	3
PHC 6004	Injury Epidemiology and Prevention	3
PHC 6007	Cancer Epidemiology	3
PHC 6009	AIDS Epidemiology and Control	3
PHC 6012	Current Research in Epidemiology	3
PHC 6014	Behavioral Epidemiology	3
PHC 6020	Clinical Epidemiology	3
PHC 6033	Mechanism of Complex Disease in Public Health	3
PHC 6055	Data Management and Epidemiologic Analysis Using SAS/SPSS	3
PHC 6062	Systematic Reviews and Meta-Analysis	3
PHC 6064	Applied Statistical Methods for Discrete Data	3
PHC 6251	Disaster and Emergency Epidemiology	3
PHC 6443	Ethical Issues in Public Health	3
PHC 6510	Advanced Infectious and Tropical Disease Epidemiology	3
PHC 6536	Health Demography	3
PHC 6591	Reproductive Health Epidemiology	3
PHC 6703	Epidemiology Methods: Experimental Design	3
PHC 6715	Survey Research in Public Health	3
PHC 6762	International Public Health	3
PHC 6907	Independent Study in Public Health	1-3
PHC 6934	Scientific Writing and Oral Presentation in Epidemiology	3
PHC 6595	Genetic Epidemiology	3
PHC 6034	Intermediate Epidemiology	3

\* or any other advisor-approved elective, including those offered as Major in Epidemiology courses.

### Practicum and Culminating Experience: (6 credits)

PHC 6945	Practicum in Public Health	3
PHC 6930C	Integrative Seminar in Public Health	3

PHC 6945 (Practicum) and PHC 6930C (culminating experience) are both required for all MPH students. The Practicum may be taken after completing a minimum of 30 hours, including all core courses. The Practicum may be waived if the student has at least 3 years of relevant practice experience working in a public health practice setting. The waiver request is prepared and submitted by the student, through their Faculty Advisor and Department Chair, for final approval/disapproval by the Academic Public Health Director. If the Practicum requirement is waived, the student will need to substitute 3 additional approved hours so that the total curriculum hour requirement of 45 is met. MPH students are expected to complete PHC 6930c Integrative Seminar in Public Health during their last semester in the program.

## MPH in Infectious Disease Epidemiology

The Master's of Public Health major in Infectious Disease Epidemiology (INFDISEPI) is designed to prepare students to address the challenge of emerging and

reemerging infectious diseases, especially for tropical locations such as Miami and South Florida.

### Admission Requirements

Applicants must meet the University's general graduate admission requirements:

1. A Bachelor's degree or equivalent from an accredited college or university or, in the case of foreign students, an institution recognized in its own country as preparing students for further study at the graduate level.
2. A minimum 3.0 GPA on the last 60 undergraduate hours. In addition, applicants are required to submit 1) a current resume; and 2) a written statement of purpose (career goals). Applicants are also required to submit three letters of recommendation.
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. Students with diverse backgrounds are encouraged to apply.
4. Submission of official GRE scores is optional. If a student decides to submit GRE scores, the scores must be less than 5 years old.

### MPH Core Curriculum: (15 credits)

PHC 6000	Epidemiology I: Introduction to Public Health Epidemiology	3
PHC 6052	Biostatistics I	3
PHC 6102	Health Policy in a Global Context	3
PHC 6315	Introduction to Environmental Health Sciences	3
PHC 6410	Health Behavior and Public Health	3

### Epidemiology Core: (15 credits)

PHC 6002	Infectious Disease Epidemiology	3
PHC 6003	Chronic Disease Epidemiology	3
	<b>or</b>	
PHC 6008	Cardiovascular Disease Epidemiology	3
PHC 6013	Epidemiology II: Observational Design	3
PHC 6016	Social Epidemiology	3
	<b>or</b>	
PHC 6441	Epidemiology of Health Disparity	3
PHC 6091	Biostatistics II	3

### Major in Infectious Disease Epidemiology Required Courses: (9 credits)

PHC 6009	AIDS Epidemiology and Control	3
PHC 6510	Advanced Infectious and Tropical Disease Epidemiology	3
PHC 6591	Reproductive Health Epidemiology	3

### Practicum and Culminating Experience: (6 credits)

PHC 6945	Practicum in Public Health	3
PHC 6930C	Integrative Seminar in Public Health	3

PHC 6945 (Practicum) and PHC 6930C (culminating experience) are both required for all MPH students. The Practicum may be taken after completing a minimum of 30 hours, including all core courses. The Practicum may be waived if the student has at least 3 years of relevant practice experience working in a public health practice setting. The waiver request is prepared and submitted by the student, through their Faculty Advisor and Department Chair, for final approval/disapproval by the Academic Public Health Director. If the Practicum requirement is waived, the student will need to substitute 3 additional

approved hours so that the total curriculum hour requirement of 45 is met. MPH students are expected to complete PHC 6930C Integrative Seminar in Public Health during their last semester in the program.

### Combined MD and MPH - major in Epidemiology Degree Pathway

The Herbert Wertheim College of Medicine (HWCOM) and the Robert Stempel College of Public Health and Social Work (Stempel College) offer a combined degree pathway of a Master's of Public Health with a major in Epidemiology and a Doctor of Medicine.

An MPH is a professional public health degree emphasizing the understanding of population health and disease. The MD degree is a clinical medicine degree focusing on patient-centered clinical care.

Students may apply to the combined pathway in their third year of medical study. Each College will independently review and admit applicants to their programs. Only students admitted to both programs will enroll in classes in the combined program. Students will be expected to complete 45 credits for the MPH and all requirements for the MD degree.

Combined degree pathway students complete the first three years of coursework in the MD degree program at HWCOM. At the beginning of the fourth period of study of the MD degree program curriculum, students admitted to the combined degree pathway pause their medical studies and begin classes as part of the MPH program. Classes in the MPH program are taken during the fall, spring, and summer semesters of the medical student's fourth year of study. During this time, students complete 36 hours of course work in the MPH program. Nine credits taken through HWCOM count toward the 45 credits required for the MPH degree.

At the beginning of the fifth year, students resume study in Period 4 of the MD degree program curriculum. Students who successfully complete all requirements graduate with both degrees at the end of the 5 years.

### Admissions Process:

Medical students in the summer or fall of their third (M3) year (prior to November 1st) must make a formal application to the COM MPH Application Committee.

This application will include a personal statement. They must also get approval from the MSEPC and the Executive Associate Dean for Academic Affairs prior to applying to the MPH program.

Applications will only then be reviewed by the MPH - Epidemiology program admission committee. Applicants to the combined MD/MPH pathway will not be required to submit GRE scores. MCAT scores will be accepted.

### Doctor of Philosophy in Public Health Major in Epidemiology

The Doctor of Philosophy (Ph.D.) in Public Health is available with a major in Epidemiology. Students will be expected to demonstrate significant research capacity by completing 60 credits beyond the Master's degree and through the writing of an original dissertation.

### Doctoral Admissions

Applicants must meet the University's general graduate admission requirements:

1. A four-year bachelor's degree or equivalent from a nationally accredited institution or, in the case of foreign students, from a well-established institution of higher learning that is authorized to grant degrees by appropriate authorities in that country.
2. A minimum of a 3.0 GPA, "B" average, in the last 60 upper-division undergraduate coursework, or a graduate degree from a nationally accredited institution.
3. Official GRE scores (scores must be no more than five years old).
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or a 6.5 overall on the IELTS is required.

The College also requires:

1. A current resume.
2. Three letters of recommendation.
3. A writing sample (master's thesis or project, published manuscript, or other).
4. A personal statement of interest.

Potential applicants are strongly encouraged to contact individual faculty to discuss common research interests since admission decisions may require identification of a potential faculty mentor.

### Doctoral Requirements

A student may enroll for dissertation credits after completing all coursework, passing the candidacy examination, and being advanced to candidacy. Dissertation credits cannot be taken before advancement to candidacy.

The candidacy examination will be prepared and graded by a committee consisting of a minimum of three faculty members. Admission to candidacy requires that a majority of the committee members agree that the student passed the examination.

After a doctoral student is admitted to candidacy, continuous registration for at least 3 dissertation credit hours each semester (including the summer term) is required until the dissertation requirement is fulfilled.

### Required Courses

The program requires a minimum of 75 credit hours beyond the baccalaureate which includes a minimum of 15 hours of dissertation credits. There are three components to the College Ph.D. curriculum. The first is a core curriculum shared across all majors (12 credit hours). The second component is specific to the major (27 credit hours) and secondary field courses (12 credit hours). The third component consists of the dissertation, including a minimum of 15 dissertation credit hours. The remaining credit hours to add up to the minimum university requirement of 75 credits will be determined in consultation with the student's advisor.

#### Shared Core Courses: (12 credit hours required)

PHC 6091	Biostatistics 2	3
PHC 6601	Emerging Issues in Public Health	3
PHC 7705	Methods in Evidence-Based Public Health	3

PHC 7981	Research Concepts and Proposal Development	3
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**Courses for a Major in Epidemiology** A minimum of 27 hours which include a minimum of 15 hours in methods courses and 12 hours (with a minimum of 9 at the 7000 level) in content courses.

#### Methods Courses: (15 credits hours required)

The following two methods courses are required (6 credits)

PHC 7011	Advanced Current Research in Epidemiology	3
PHC 7015	Advanced Research Methods: Experimental Design	3

Three additional methods courses are chosen from the below list (9 credits)

PHC 6056	Longitudinal Health Data Analysis	3
PHC 6059	Survival Data Analysis	3
PHC 6064	Applied Statistical Methods for Discrete Data	3
PHC 6080	SAS Computing for The Health Sciences	3
PHC 6099	R Computing for Health Sciences	3
PHC 7719	Quantitative Multivariate Analysis in Health Sciences Research	3

#### Content Courses: (12 credit hours required from the list of courses below)

PHC 6000	Epidemiology I: Introduction to Public Health Epidemiology	3
PHC 6001	Environmental and Occupational Epidemiology	3
PHC 6002	Infectious Disease Epidemiology	3
PHC 6003	Chronic Disease Epidemiology	3
PHC 6004	Injury Epidemiology and Prevention	3
PHC 6007	Cancer Epidemiology	3
PHC 6008	Cardiovascular Disease Epidemiology	3
PHC 6009	AIDS Epidemiology and Control	3
PHC 6013	Epidemiology II: Observational Design	3
PHC 6014	Behavioral Epidemiology	3
PHC 6016	Social Epidemiology	3
PHC 6020	Clinical Epidemiology	3
PHC 6062	Systematic Reviews and Meta-Analysis	3
PHC 6251	Disaster and Emergency Epidemiology	3
PHC 6441	Epidemiology of Health Disparity	3
PHC 6443	Ethical Issues in Public Health	3
PHC 6510	Advanced Infectious and Tropical Disease Epidemiology	3
PHC 6536	Health Demography	3
PHC 6591	Reproductive Health Epidemiology	3
PHC 6715	Survey Research in Public Health	3
PHC 6762	International Public Health	3
PHC 6907	Independent Study: Public Health	3
PHC 6934	Scientific Writing and Oral Presentation in Epidemiology	3
PHC 6939	Special Topics in Cardiovascular Disease Epidemiology	3
PHC 7017	Advanced Epidemiology of Health Disparity	3
PHC 7162	Grant Writing in Public Health	3
PHC 7982	Public Health Pre-Dissertation Research	3
PHC 6595	Genetic Epidemiology	3
PHC 7606	Tobacco Use: Causes, Consequences, and Control	3

#### Secondary Field Courses: (12 credits required)

At least 12 credit hours of approved secondary field courses. Secondary field courses are selected from approved graduate school courses in consultation with academic advisor.

**Dissertation Requirements: (A minimum of 15 dissertation credit hours required)**

PHC 7980	Dissertation	15
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For additional and updated information about degrees offered, entrance requirements, and services, please visit our website:

<http://stempel.fiu.edu/students/advising/index.html>.