#### Twin Cities Campus

# **Epidemiology Minor**

School of Public Health - Adm

**School of Public Health** 

Link to a list of faculty for this program.

#### **Contact Information:**

School of Public Health, MMC 819, A395 Mayo Memorial Building, 420 Delaware Street, Minneapolis, MN 55455 (612-626-3500 OR 1-800-774-8636)

Email: <a href="mailto:sph-ask@umn.edu">sph-ask@umn.edu</a>
Website: <a href="http://www.sph.umn.edu">http://www.sph.umn.edu</a>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2019
- Length of program in credits (Masters): 7 to 8
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the <u>General Information</u> section of the catalog website for requirements that apply to all major fields.

Epidemiologists investigate the determinants of health and disease, and use data to identify changes in the public health burden of disease. The Epidemiology minor trains students to analyze public health trends, design and implement studies, and interpret results for policy and program development.

# **Program Delivery**

This program is available:

via classroom (the majority of instruction is face-to-face)

# Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Other requirements to be completed before admission:

Admission to the epidemiology graduate minor is contingent upon enrollment in a University of Minnesota master's or doctoral degree-granting program. Consult first with the program advisor about the advisability of an epidemiology minor. For information regarding the minor, and to connect with the directors of graduate studies for the master's or doctoral minor regarding requirements, contact the epidemiology graduate program coordinator at epichst@umn.edu.

For an online application or for more information about graduate education admissions, see the <u>General Information</u> section of the catalog website.

## **Program Requirements**

Use of 4xxx courses towards program requirements is not permitted.

All minor field coursework must be taken A/F. All coursework must be graded with a minimum grade of B- unless otherwise stated.

GPA to graduate with the minor is 3.00.

# **Program Sub-plans**

Students are required to complete one of the following sub-plans. Students may not complete the program with more than one sub-plan.

#### Masters

#### Coursework

#### Required Coursework (6 credits)

Students must complete PUBH 6342 and PUBH 6341 or PUBH 6320. Students choosing PUBH 6320 must complete the course with an A- minimum grade.

PUBH 6342 - Epidemiologic Methods II (3.0 cr) PUBH 6341 - Epidemiologic Methods I (3.0 cr) PUBH 6320 - Fundamentals of Epidemiology (3.0 cr)

#### Electives (2 credits)

All students select at least one course in consultation with the Epidemiology director of graduate studies.

PUBH 6381 - Genetics in Public Health in the Age of Precision Medicine (2.0 cr)

PUBH 6385 - Epidemiology and Control of Infectious Diseases (2.0 cr)

PUBH 6386 - Cardiovascular Disease Epidemiology and Prevention (2.0 cr)

PUBH 6387 - Cancer Epidemiology (2.0 cr)

PUBH 6389 - Nutritional Epidemiology (2.0 cr)

PUBH 6605 - Sexual, Reproductive, and Perinatal Public Health (2.0 cr)

#### **Doctoral**

#### **Doctoral Minor Options**

The doctoral minor can be completed in one of two ways: Option 1 is for students with the necessary background of epidemiology coursework, as determined by the Epidemiology director of graduate studies; Option 2 is for students without that necessary coursework.

#### Required Coursework (12 credits)

## **Doctoral Required Options**

#### Option 1 (10 credits)

Students with the necessary epidemiology background take the following courses:

PUBH 7401 - Fundamentals of Biostatistical Inference (4.0 cr)

PUBH 8341 - Advanced Epidemiologic Methods: Concepts (3.0 cr)

PUBH 8342 - Advanced Epidemiologic Methods: Applications (3.0 cr)

## or Option 2 (10 credits)

Students without the necessary epidemiology background take the following courses:

PUBH 6341 - Epidemiologic Methods I (3.0 cr)

PUBH 6342 - Epidemiologic Methods II (3.0 cr)

PUBH 6450 - Biostatistics I (4.0 cr)

# Electives (2 credits)

Take at least 2 elective credits, in consultation with the Epidemiology director of graduate studies, which may or may not be listed below.

PUBH 6365 - Global Challenges in Infectious Disease Epidemiology (2.0 cr)

PUBH 6375 {Inactive}(2.0 cr)

PUBH 6381 - Genetics in Public Health in the Age of Precision Medicine (2.0 cr)

PUBH 6383 {Inactive}(2.0 cr)

PUBH 6385 - Epidemiology and Control of Infectious Diseases (2.0 cr)

PUBH 6386 - Cardiovascular Disease Epidemiology and Prevention (2.0 cr)

PUBH 6387 - Cancer Epidemiology (2.0 cr)

PUBH 6389 - Nutritional Epidemiology (2.0 cr)

PUBH 7405 - Biostatistical Inference I (4.0 cr)

PUBH 7406 - Biostatistical Inference II (3.0 cr)

PUBH 7415 - Introduction to Clinical Trials (3.0 cr)

PUBH 7430 - Statistical Methods for Correlated Data (3.0 cr)

PUBH 7435 {Inactive}(3.0 cr)

PUBH 7440 - Introduction to Bayesian Analysis (3.0 cr)

PUBH 7445 - Statistics for Human Genetics and Molecular Biology (3.0 cr)

PUBH 7450 - Survival Analysis (3.0 cr)

PUBH 7470 - Study Designs in Biomedical Research (3.0 cr)

PUBH 7475 - Statistical Learning and Data Mining (3.0 cr)

PUBH 7485 - Methods for Causal Inference (3.0 cr)