Epidemiology is the study of the patterns, causes, and effects of health and disease conditions in defined populations. Epidemiology's main role is preventing the onset and spread of disease by finding the reasons why some groups of people are healthier than others and then removing or controlling these causes. As such completion of the Epidemiology certificate will prepare students to (1) analyze and interpret data and present results in words, tables, charts, and graphs; (2) design epidemiologic studies and compare and contrast study methodology; and (3) critique studies for their validity and contribution to the discipline. Students will receive a certificate from the Department of Public Health. Completion of certificates is *not* noted on academic transcripts.

Eligibility

Only matriculated Master of Public Health (MPH) students at Brigham Young University (BYU) who did not complete the Epidemiology Emphasis as undergraduate students at BYU are eligible for an Epidemiology certificate.

Requirements

Students must complete 18 credits (4 classes plus field experience) in order to earn the Epidemiology certificate.

Course[a, b, c]	Title	Credits
Complete the following course(s):		
HLTH 440	Introduction to Statistical Computing in Epidemiology (SAS)	3
HLTH 449	Epidemiologic Study Design and Analysis (prerequisites HLTH 345, 440, and 447)	3
HLTH 493	Epidemiology Capstone (prerequisites HLTH 345, 447, and 449)	3
HLTH 688R	Field Experience	6
Complete 3.0 credits from the following course(s):		
HLTH 434	Advanced Evaluation Methods (prerequisites HLTH 210 and 330)	3
HLTH 482	Medical Geography (prerequisite STAT 121)	3
HLTH 603R	Special Topics in Public Health (up to 3 credits can be counted for the certificate)	3
HLTH 691R	Mentored Research (up to 3 credits can be counted for the certificate)	3
HLTH 696R	Independent Studies (up to 3 credits can be counted for the certificate)	3
MFHD 605	Structural Equation Modeling in Social Sciences (prerequisite STAT 511 or equivalent)	3
MPA 635	Data Visualization (prerequisite MPA 630 or equivalent)	1.5
PSYCH 502	Data Analysis in Psychological Research 2 (prerequisite PSYCH 501 or instructor's consent)	3
SOC 300	Methods of Research in Sociology (prerequisites SOC 111, 112, or 113)	3
STAT 330	Introduction to Regression (prerequisites MATH 112 and STAT 230)	3
STAT 381	Statistical Computing (prerequisites STAT 223, 224, and 330)	3
STAT 435	Nonparametric Statistical Methods (prerequisite STAT 330 or 511)	3
STAT 469	Analysis of Correlated Data (prerequisite STAT 330)	3
STAT 538	Survival Analysis (prerequisite STAT 340)	3
Total		18

[a] MPH students can count up to 10.0 credits of 300/400 level courses toward their MPH degree, but not more than 10.0 credits. Only one 300 level course may be counted. Students must petition to Graduate Studies for approval to count a 300-level course.

[b] If any listed course(s) were taken as part of an undergraduate degree, then students must substitute the course(s) with another approved elective.

[c] Students may propose additional courses for approval by their graduate faculty advisor.

[d] Students must petition to Graduate Studies for approval to count a 300-level course.

Field Experience and "R" Courses Requirements

Students need to complete a field experience (HLTH 688R) in epidemiology as approved by their graduate faculty advisor.

Students choosing to complete HLTH 603R – Special Topics in Public Health, HLTH 691R – Mentored Research, and/or HLTH 696R – Independent Studies as an elective(s) are required to focus on epidemiological topics, readings, research, or studies.