Epidemiology — Dr.P.H.

Program director
Jayakaran S. Job

The Doctor of Public Health (Dr.P.H.) degree is an advanced professional degree with a focus on evidence-based public health practice, applied theory, and research. The Dr.P.H. degree program develops graduates with well-rounded skills who are able to administer and practice public health epidemiology in governmental, international, nonprofit, and private sector settings (such as local county and state health departments, the Centers for Disease Control and Prevention, the World Health Organization); as well as to engage in teaching, research, and service in academia.

The curriculum is planned on an individual basis and is designed around the student's interest and academic needs, the program requirements, and the nature of the proposed research project. The student is expected to gain relevant teaching experience as part of the program. Students are responsible for gaining the commitment of an appropriate faculty member to serve as their research mentor.

Learning objectives
Upon completion of the Dr.P.H. degree, the student will be able to independently:

• Demonstrate knowledge of disease etiology, progression, and prevention and control, as relevant to public health practice and research.
• Identify and address public health issues from a broad range of disciplines and perspectives by applying evidence-based theory and research to design, for example, research proposals (using National Institutes of Health [NIH] guidelines).
• Use effective communication methods (including oral presentations and peer-reviewed publications) across diverse audiences to inform and influence public health actions.
• Critically evaluate, analyze, and synthesize biomedical literature and health-related data to advance programs, policies, and systems to promote public health.
• Apply professional, ethical leadership and administrative skills in public health settings.

Educational effectiveness indicators
• Student assistance
• Comprehensive examination
• Dissertation

Prerequisites
In addition to the entrance requirements for all Dr.P.H. degrees (http://llucatalog.llu.edu/public-health/doctoral-degrees/#admissionstext), applicants to the Dr.P.H. degree in epidemiology program must have:

• M.P.H. degree in either epidemiology or biostatistics preferred
• Organic chemistry
• Statistics
• Behavioral science
• Microbiology

• Biochemistry

Applicants should also have taken the following courses, or equivalent courses at the graduate level:

• EPDM 510 Epidemiologic Methods I
• EPDM 511 Epidemiologic Methods II
• STAT 521 Biostatistics I
• STAT 548 Analytical Applications of SAS

Program requirements
In addition to the standard DrPH corequisites, (http://llucatalog.llu.edu/public-health/doctoral-degrees/#drphtext) the DrPH program in Epidemiology requires the following:

Corequisites
May be taken during first two quarters of program, in addition to units required for degree; advanced standing from previous MPH degrees considered.
EPDM 512 Epidemiologic Methods III 3
STAT 522 Biostatistics II 4

Epidemiology Core
EPDM 515 Clinical Trials 3
EPDM 635A Epidemiological Studies of Seventh-day Adventists A 1
EPDM 635B Epidemiological Studies of Seventh-day Adventists B 1
STAT 515 Grant- and Contract-Proposal Writing 3
STAT 564 Survey and Advanced Research Methods 3

Selectives 9
EPDM 555 Epidemiologic Methods in Outcomes Research and Continuous Quality Improvement
HPRO 543 Writing for Health Professionals
NUTR 543 Concepts in Nutritional Epidemiology
STAT 523 Biostatistics III
STAT 525 Applied Multivariate Analysis
STAT 535 Modern Nonparametric Statistics
STAT 545 Survival Analysis
STAT 557 Research Data Management
STAT 569 Advanced Data Analysis

Descriptive epidemiology

Choose from the following: 6
EPDM 544 Epidemiology of Infectious Disease
EPDM 565 Epidemiology of Cancer
EPDM 566 Epidemiology of Cardiovascular Disease
EPDM 567 Epidemiology of Aging
EPDM 588 Environmental and Occupational Epidemiology

Biomedical sciences
AHCJ 538 Histology 3
HPRO 501 Human Anatomy and Physiology I 6
HPRO 531 Pathology of Human Systems I 3
HPRO 532 Pathology of Human Systems II 3
NUTR 517 Advanced Nutrition I: Carbohydrates and Lipids 4
or NUTR 518  Advanced Nutrition II: Proteins, Vitamins, and Minerals

Administration and leadership
Choose from the following, subject to availability of the course and sufficient course enrollment:

- HADM 510  Health Policy Analysis and Synthesis
- HADM 514  Health-Care Economics
- HADM 528  Organizational Behavior in Health Care
- HADM 529  Health-Care Negotiations and Conflict Resolution
- HADM 542  Managerial Accounting for Health-Care Organizations
- HADM 559  Health-Care Marketing
- HADM 574  Managing Human Resources in Health-Care Organizations
- HADM 584  Current Topics in Health Policy and Leadership
- HADM 585  Policy Development for a Twenty-First Century Health System
- HADM 595  Leadership—Past, Present, and Future
- HADM 604  Health Systems Strategic Planning
- HADM 605  Health-Care Quality Management

Religion
- RELE 5__  Graduate-level ethics
- RELR 5__  Graduate-level relational
- RELT 5__  Graduate-level theological

Other required courses
- EPDM 606  Doctoral Seminar in Epidemiology
- Electives
- Research and dissertation
- EPDM 685  Preliminary Research Experience
- EPDM 694  Research
- EPDM 697  Dissertation Proposal
- EPDM 698  Dissertation

Total Units 103

1 3 units must be chosen from either EPDM 565 or EPDM 566. Remaining 6 units can be chosen from courses listed.
2 One unit per every fall, winter and spring quarters in program, minimum of 9 units
3 Chosen in consultation with advisor; usually from another discipline or school
4 Repeated registrations may be required to fulfill total units

Additional Requirements

EPDM/STAT forums
Doctoral students are required to attend a minimum of ten epidemiology, biostatistics, and/or Adventist Health Study forums during each year of their program.

Culminating experience
As a part of the culminating experience, the student completes two publishable papers for submission to peer reviewed journals, successfully defends dissertation, and submits a committee approved dissertation manuscript. Further details provided in the Doctoral Handbook.

Normal time to complete the program
5.33 years based on less than full-time enrollment