

DOCTORAL DEGREES

Admissions

Admissions requirements for doctoral degree programs described below are in addition to the University admissions requirements (<http://llucatalog.llu.edu/about-university/admission-policies-information/#admissionrequirements>) and program requirements. The minimum eligibility requirements for admission to a doctoral degree program include the following:

- An M.P.H. degree or master's degree in a related field from a regionally accredited institution, with a G.P.A. of 3.5 or above. Applicants with a master's degree in another field may indicate their relevant training, research and/or practice experience, or educational background comparable to the M.P.H. or the M.S. degrees. Dr.P.H. degree applicants who are admitted without an M.P.H. degree will be required to take PHCJ 606 Public Health Fundamentals, EPDM 509 Principles of Epidemiology, STAT 521 Biostatistics I or AHRM 514 Biostatistics, and STAT 548 Analytical Applications of SAS and R or STAT 549 Analytical Applications of SPSS or equivalent courses to fulfill the public health fundamental learning outcomes described in section D.1 of the 2016 CEPH criteria.
- Satisfactory performance on GRE or equivalent is required; scores must have been attained within the past five years. Although there is no minimum GRE score requirement, 40th percentile or higher in each of the three sections of the GRE (verbal, quantitative, and writing) is considered competitive.
- Religious affiliation is not a requirement; but students are expected to adhere to on-campus requirements of modest dress, abstinence from alcohol and smoking, and attendance at weekly chapel, as applicable.

Applicants must satisfy the program-specific admission requirements, including but not limited to prerequisite courses and years of experience. Admissions decisions are based on review of applicant's transcripts, written statement, research and/or practice interest, letters of recommendation, GRE scores or equivalent, and interview. Satisfying minimum requirements does not guarantee admission.

Dr.P.H. degree

The Doctor of Public Health (Dr.P.H.) programs prepare individuals for leadership positions in public health practice in health-care systems, governmental agencies, non-profit organizations, and community setting. The competency-based curriculum delivers advanced public health education with specific focus within disciplines, and applied practice and integrated learning experiences that address the doctoral foundational and discipline specific competencies. Students may enroll on a full- or part-time basis; however, they must advance to candidacy within three years of entering the program, and complete the program within five years. Majors are available in:

- Health Education—on campus and online
- Preventive Care—on campus and online
- Health Policy and Leadership—on campus and online

Dr.P.H. degree programs offer preparation for careers in which advanced expertise in program planning, implementation, evaluation and policy analysis are required. Students' doctoral projects (integrated learning experiences) and applied practice experiences are key components in the development of critical thinking and leadership skills.

A minimum of two years is generally required to complete coursework, for full-time students. Program plans are described under individual majors. The number of units of course work required to complete the program may be reduced but is not to be fewer than 54 units plus applied practice experience and integrated learning experience units at Loma Linda University.

The overall Dr.P.H. curriculum is designed using a faith-based lens to accurately reflect the mission and vision of Loma Linda University and the School of Public Health. Additionally, nine units of courses offered by the LLU School of Religion are included in the curriculum to allow the students to enhance personal spiritual development as well as application of faith-based values to professional practice.

Dr.P.H. Foundational Competencies

The Dr.P.H. core curriculum is based on the doctoral foundational competencies from 2016 CEPH criteria. These include:

Critical Analysis: Ability to synthesize and apply evidence based research and theory from a broad range of public health disciplines and health related data sources to advance programs, policies, and systems promoting population health.

Competencies:

1. Analyze quantitative, qualitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple levels (individual, group, organization, community and population).
2. Design a quantitative, qualitative, mixed methods, policy analysis or evaluation project to address a public health issue.
3. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health.

Leadership, Management and Governance: Ability to create, communicate and apply shared vision, inspire trust and motivate others, build capacity and strategies, and identify and analyze ethical issues in addressing public health problems.

Competencies:

4. Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners.
5. Propose strategies to promote inclusion and equity within public health programs, policies and systems.
6. Create a strategic plan
7. Create organizational change strategies
8. Propose human, fiscal and other resources to achieve a strategic goal.
9. Cultivate new resources and revenue streams to achieve a strategic goal.
10. Assess one's own strengths and weaknesses in leadership capacities including cultural proficiency.
11. Facilitate shared decision making through negotiation and consensus building methods.
12. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems.
13. Communicate public health science recognizing different communication styles and tools to diverse stakeholders including

individuals at all levels of health literacy, for purposes of influencing behavior and policies.

Policy, Advocacy and Programs: Ability to design system-level interventions that influences population health outcomes in transdisciplinary team approaches that promote health equity and disease prevention across diverse communities and cultures.

Competencies:

14. Design a system-level intervention to address a public health issue.
15. Integrate knowledge of cultural values and practices in the design of public health policies and programs.
16. Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis.
17. Propose inter professional team approaches to improving public health.

Education and Workforce development: Ability to develop and apply pedagogical principles and skills to identify learning needs of a population and promote learning in academia, organizational and community settings.

Competencies:

18. Assess a population's knowledge and learning needs.
19. Use best practice modalities in pedagogical practices.
20. Deliver training or educational experiences that promote learning in academic, organizational or community settings.

Applied practice and integrated learning experience

All Dr.P.H. students will engage in an applied practice experience (AP) that results in a final product that is relevant to public health organizations. The culminating activity is an integrated learning experience (ILE) that includes a field-based project emphasizing advanced practice. Both AP and ILE will demonstrate integration of foundational and concentration-specific competencies.

Dr.P.H. degree corequisites

Students must have an M.P.H. from an accredited institution or complete courses in PHCJ 606 Public Health Fundamentals, EPDM 509 Principles of Epidemiology, STAT 521 Biostatistics I or AHRM 514 Biostatistics, and STAT 548 Analytical Applications of SAS and R or STAT 549 Analytical Applications of SPSS or equivalent courses prior to taking doctoral level public health core courses.

Advancement to candidacy

Advancement to candidacy is granted by the Academic Dean. When the doctoral foundational coursework is completed, the student must successfully pass a written comprehensive examination. The next step is the qualifying examination. The student is required to submit a concept paper describing the proposed doctoral project, and proposed Doctoral Project Guidance Committee. Students are advanced to candidacy when they successfully present their doctoral project proposals that include the rationale and significance to the field, approach and tools, and outcomes (deliverables). Successful completion of the doctoral project also requires a high quality written document (guidelines outlined in the SPH doctoral handbook).

Teaching experience

Each doctoral student is required to serve as a teaching assistant for a minimum of one quarter. Additional information is detailed in the SPH Doctoral Handbook.

Professional Development

All doctoral students are required to present their work (applied practice experience or integrated learning experience) at a scientific or professional conference either as a poster or as a short oral presentation.

Ph.D. degree

The Doctor of Philosophy (Ph.D.) programs prepare individuals for careers in scientific research and/or teaching at universities and leadership positions in governmental agencies, health care, industry and private organizations. The Ph.D. curriculum provides advanced didactic training in a specific discipline, develops students' critical thinking and research skills to conduct independent research, and enhances written and oral communication to the scientific community to advance the field through dissertation and peer-reviewed publications. Students may enroll on a full- or part-time basis; however, they must advance to candidacy within three years of entering the program, and complete the program within five years. Majors are available in:

- Epidemiology
- Nutrition

Ph.D. degree programs offer preparation for careers in which advanced expertise in research and the discipline are required. Students' doctoral dissertation and peer-reviewed manuscripts are key components in the development of critical thinking, research and scientific communication skills.

A minimum of two years is generally required to complete coursework, if full time. Program plans are described under individual majors. The number of units of coursework required to complete the program may be reduced but is not to be fewer than 47 units plus 12 research/dissertation units at Loma Linda University. Students whose academic backgrounds include substantial graduate study in a cognate field may be granted advanced standing.

The overall Ph.D. curriculum is designed using a faith-based lens to accurately reflect the mission and vision of Loma Linda University and the School of Public Health. Additionally, nine units of courses offered by the LLU School of Religion are included in the curriculum to allow the students to enhance personal spiritual development as well as application of faith-based values to professional practice.

Learner outcomes

Please see the individual program descriptions for the specific program learning outcomes. Program learning outcomes tied to scientific communication, both oral and written, educational pedagogy, and professional and scientific ethics are shared across all doctoral programs (both Dr.P.H. and Ph.D.).

Comprehensive and qualifying examinations

Students are required to demonstrate ability and readiness to proceed with doctoral study and research by successfully passing the comprehensive examination. Degree specific descriptions of the comprehensive examination can be found in the *Doctoral Handbook*.

Advancement to candidacy

Advancement to candidacy is granted by the Academic Dean. When the required discipline specific and research methods courses are completed, the student must successfully pass a written comprehensive

examination. The next step is the qualifying examination. The student is required to submit a concept paper describing the proposed dissertation research, and members of the proposed Dissertation Guidance Committee (DGC). Students are advanced to candidacy when they successfully defend (oral examination) their dissertation proposals. Proposal should include the first three chapters of the dissertation— Introduction, Review of Literature, and Methods. The details of this process are described in the SPH Doctoral Handbook.

Teaching experience

All doctoral students are required to serve as a teaching assistant for a minimum of one quarter. Additional information is detailed in the SPH Doctoral Handbook.

Professional development

All doctoral students are required to present their research work at a scientific conference either as a poster or as short oral presentation.

Programs

- Epidemiology – Ph.D. (<http://llucatalog.llu.edu/public-health/epidemiology/phd/>)
- Health Education – Dr.P.H. (<http://llucatalog.llu.edu/public-health/health-education-drph/>)
- Health Policy and Leadership – Dr.P.H. (<http://llucatalog.llu.edu/public-health/health-policy-leadership-drph/>)
- Nutrition – Ph.D. (<http://llucatalog.llu.edu/public-health/nutrition-phd/>)
- Preventive Care – Dr.P.H. (<http://llucatalog.llu.edu/public-health/preventative-care-drph/>)