Introduction

Epidemiology is the study of the distribution and determinants of disease and injury in human populations. Epidemiologists study the variation of disease in relation to age, sex, race, education, occupational and social characteristics, place of residence, susceptibility, exposure to specific agents, or other pertinent characteristics. Also of concern are the temporal distribution of disease, the examination of trends, cyclical patterns and intervals between exposure to causative factors and onset of disease. The scope of the field ranges from study of the causes of disease to the control and prevention of disease and distribution of health care resources. Epidemiology focuses on health problems in population groups rather than in an individual. Epidemiology is an exciting field with constantly expanding boundaries. The range of activities considered epidemiology include investigation and control of disease outbreaks, epidemiologic and etiological studies of infectious diseases, such as HIV and sexually transmitted diseases, and chronic diseases, including cardiovascular diseases, cancer, diabetes, chronic obstructive pulmonary disease, assessment of the effect of risk or protective factors such as tobacco smoking, alcohol drinking, diet, obesity, physical activities, environmental and industrial hazards, evaluation of new preventive measures as well as clinical treatment, determination of the health needs of populations, and evaluation of effectiveness of prevention strategies and health services.

In addition to the tools and theories developed by epidemiologists (see Modern Epidemiology 3, Rothman, Greenland and Lash 2008), epidemiologists also employ cutting-edge methods and advanced tools from other fields such as medicine, statistics, mathematics, molecular biology and microbiology, (epi)genetics, immunology, sociology, demography and medical geography. The core of epidemiologic methodology is growing constantly and includes not only statistical methods and principles of study design but unique ways of thinking about causation. The development of new concepts of scientific investigation in human populations contributes to epidemiology being increasingly recognized as a key method for etiologic studies in groups of people.

An epidemiologist may work in a wide variety of settings, including international health agencies, federal government agencies and health programs, state and local health departments, health maintenance organizations, hospitals, colleges and universities, and numerous research and teaching institutions, both privately and publicly sponsored.
Mission & Objectives of the Department of Epidemiology

The objectives of the Department of Epidemiology fall into three broad categories: teaching, research, and community services.

Research

The faculty of the Department of Epidemiology 1) advances the field of knowledge of disease causation, transmission, pathogenesis, and prevention through studies of the distribution, etiologies, and prevention and control of diseases in human populations, through epidemiologic investigation, laboratory studies, and through incorporation of techniques developed by other disciplines; and 2) provides a technical base for optimal use and distribution of health resources aimed at promoting community health.

Teaching

The academic objectives of the Department are:

1. To prepare students for careers in epidemiologic research, teaching and community service.

2. To provide a stimulating academic environment that challenges students to develop an in-depth understanding of epidemiologic methods, an ability to conceptualize problems, to apply these to a wide range of health problems in populations, and to continue to expand their field of knowledge.

3. To provide students enrolled in other programs in the Fielding School of Public Health with an understanding of the basic principles of epidemiology and of their application to the resolution of health problems in the community.

4. To join with faculty of other departments in the Fielding School of Public Health, the David Geffen School of Medicine, and the Schools of Nursing and Dentistry in conducting multidisciplinary educational programs for the training of more broadly qualified health professionals and researchers.

5. To help improve the quality of epidemiology practice in other countries, through training of international students and health professionals.

Community Service

The faculty of the department strives to provide service to the community by disseminating knowledge and programs to empower the community to improve and maintain health; by carrying out health related research which is relevant to community needs; and by giving technical advice and assistance to other programs in the School of Public Health, to other academic institutions, to local, state, national and international health agencies, and to other individuals or groups in the community.
Degree Program Requirements

Master of Science Degree (MS)

Please refer to the Graduate Division’s Program Requirements for UCLA Graduate Degrees grad.ucla.edu for more detailed information regarding the degree requirements for the Master of Science (MS) in Epidemiology.

The MS degree is a research-oriented degree within the general field of epidemiology. It includes 56 units of coursework and the preparation of a thesis or report/comprehensive examination and is appropriate for persons intending to go into a research career.

Students in the MS program take Epidemiology 200A and Biostatistics 100A in their first quarter, Epidemiology 200B and Biostatistics 100B in their second quarter, and Epidemiology 200C in their third quarter. Students meeting eligibility requirements to take the Biostatistics 100A waiver examination may waive-out of Biostatistics 100A by passing the exam. Students who waive out of a required course must make up the units with a graduate-level elective course taken for a letter grade.

Students are encouraged to consult their academic advisers for recommendations on course selection. Students who plan to take their epidemiology first year core courses (Epi 200A, Epi 200B and Epi 200C) in a different sequence must have prior approval from their advisers.

MS students with US clinical doctorates or currently enrolled in a US medical school should consult their adviser and the Academic Affairs Officer to confirm specific course requirements.

The Graduate Division does not allow "Incomplete" grades in the final term of enrollment without a justification letter from the course instructor. Only extenuating circumstances will be considered and are subject to approval.

**All courses must be taken for a letter grade.**

Minimum Units Required: 56

At least 20 units must be in the 200 or 500 series.

Department Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSTAT 100A</td>
<td>4</td>
<td>Introduction to Biostatistics</td>
</tr>
<tr>
<td>BIOSTAT 100B</td>
<td>4</td>
<td>Introduction to Biostatistics</td>
</tr>
<tr>
<td>EPIDEM 200A</td>
<td>6</td>
<td>Epidemiology Methods I</td>
</tr>
<tr>
<td>EPIDEM 200B</td>
<td>6</td>
<td>Epidemiologic Methods II</td>
</tr>
<tr>
<td>EPIDEM 200C</td>
<td>6</td>
<td>Epidemiologic Methods III</td>
</tr>
<tr>
<td>EPIDEM 220</td>
<td>4</td>
<td>Principles of Infectious Disease Epidemiology</td>
</tr>
<tr>
<td>Chronic Disease Epidemiology Course</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Data Management Course</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Multi-Regression Statistics Course</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
The student fulfills the remaining units with courses selected from the following. The Department may also announce new courses during the Academic Year. Please consult with your advisor and the Registrar’s Schedule of Classes each quarter to confirm course offerings.

- Bioterrorism: Epidem C275
- Cancer Epidemiology: Epidem 242, 243, 244, 245
- Cardiovascular Epidemiology: Epidem 240
- Data Management and Analysis: Epidem M403, 404, 410
- Environmental Epidemiology: Epidem 260
- Genetic Epidemiology: Epidem 249
- Global Epidemiology: Epidem 273, 420
- Infectious Disease: Epidem 227, 228, 230, 231, 232, 233
- Injuries: Epidem M252
- Methods, Quantitative: Epidem M204, M211, M212
- Methods, Other: Epidem M216, M218, 413
- Nutritional Epidemiology: Epidem M254, 257, M258
- Occupational Epidemiology: Epidem M261, 265
- Reproductive Epidemiology: Epidem 267
- Social and Behavioral Epidemiology: Epidem 268, 270, M272, 412

A thesis or a comprehensive examination and MS report must be completed before graduation.

**Thesis Plan:**
If the Thesis Plan is approved, a thesis committee of three member faculty is appointed by the Dean of the Graduate Division on recommendation of the Department. The Chair of the committee and at least one other member must hold academic appointments in the Department of Epidemiology. The committee approves the thesis prospectus before the student files for advancement to candidacy. The thesis must be acceptable to the thesis committee.

**Capstone Plan:**
If the Capstone Plan is chosen, a guidance committee of three Department of Epidemiology faculty is appointed. A comprehensive examination administered by the guidance committee on the major area of study must be passed. If failed, the examination may be repeated once. In addition, the student must complete an individual research project with an article appropriate for publication. Selected projects require prior approval from the guidance committee.
**MS Competencies for Epidemiology Majors**

Upon graduation, a student with an MS in epidemiology should be able to do the following:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Source of Training and Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand how to assess, critique, and interpret epidemiological studies, including their strengths and weaknesses</td>
<td>Epi 200A, 200B, 200C, Thesis/Report</td>
</tr>
<tr>
<td>2. Describe a public health problem in terms of magnitude, population, time and place</td>
<td>Epi 200A, 200B, 200C, Thesis/Report</td>
</tr>
<tr>
<td>3. Identify key sources of data for epidemiologic purposes</td>
<td>Epi 200A; 200B; Epi 403, Epi 404, or Epi 410</td>
</tr>
<tr>
<td>4. Identify the principles and limitations of public health screening programs</td>
<td>Epi 220*</td>
</tr>
<tr>
<td>5. Apply the basic terminology and definitions of epidemiology, including definitions of populations, sources of bias, principles of causation for both infectious and chronic morbidity and mortality, and risk and protective factors</td>
<td>Epi 200A, 200B, 200C, Epi 220, Chronic Disease Epidemiology course, Thesis/Report</td>
</tr>
<tr>
<td>8. Effectively communicate orally and in writing epidemiologic information to lay and professional audiences</td>
<td>Epi 403, Epi 404, or Epi 410; Thesis/Report</td>
</tr>
<tr>
<td>9. Observe ethical guidelines in the collection, maintenance, use and dissemination of epidemiologic data</td>
<td>Epi 403, Epi 404, or Epi 410; Thesis/Report</td>
</tr>
<tr>
<td>10. Identify, explain and apply epidemiologic principles and methods in a research, public health, or community setting</td>
<td>Epi 200A, 200B, 200C, Epi 220, Chronic Disease Epidemiology course, Thesis/Report</td>
</tr>
</tbody>
</table>

Evaluation of competencies to be demonstrated through:

- Course exams and assignments
- Committee approval of thesis or report/comprehensive exam
Master of Public Health Degree (MPH)

The Department of Epidemiology has established two different degree programs for the MPH - specialization in Epidemiology. They are: 1) the MPH for students with no prior clinical doctorate and 2) the MPH for students with a US clinical doctorate (M.D., D.D.S., D.V.M., D.N.Sc., PharmD) or currently enrolled in a US medical school.

The Master of Public Health (MPH) is a professional degree in the field of Public Health. The student is expected to focus on public health practice and to acquire broad knowledge related to professional skills.

Coursework required by the School includes Biostatistics 100A or 110A; Community Health Sciences 100; Environmental Health Sciences 100; and Health Services 100. Each 100-level course may be waived via blue petition if the student has taken a similar college- or graduate-level course, and passes the waiver examination. Waived courses must be replaced with additional elective graduate-level courses taken for a letter grade as necessary to meet the degree’s unit requirements. Students wishing to take a higher level course(s) in lieu of the 100-level series required course may substitute Environmental Health Sciences 100, and Health Policy and Management 100 with the 200A course offered by each department. Biostatistics 100A and Community Health Sciences 100 have no substitutions. Students must file a blue petition for the substitution.

Students in the MPH program take Epidemiology 200A and Biostatistics 100A in their first quarter, Epidemiology 200B and Biostatistics 100B in their second quarter, and Epidemiology 200C in their third quarter. Students meeting eligibility requirements to take the Biostatistics 100A waiver examination may waive-out of Biostatistics 100A by passing the exam.

All MPH students must submit a report demonstrating competence in epidemiologic methodology. The report may not be submitted prior to the completion of Epidemiology 400: Field Studies in Epidemiology. Epidem 400 must be taken after completion of Epidem 200C.

The Graduate Division does not allow “Incomplete” grades in the final term of enrollment without a justification letter from the course instructor. Only extenuating circumstances will be considered and are subject to approval.

MPH Comprehensive Exam

The MPH Comprehensive Examination is offered once in fall and once in spring. Notices are posted asking qualified students to sign up. The Comprehensive Examination may only be repeated once.

The MPH Comprehensive Examination is administered by the Department’s MPH Exam Committee. This examination may only be taken after the student has successfully completed Department Requirements.

Students must successfully complete the entire Epidem 200ABC series to be eligible to take the Comprehensive Examination. Only MPH students in the MPH for Clinical Scholars program may take the MPH exam while enrolled in Epidem 200C.

There is no makeup exam offered. In the quarter that a student plans to take the MPH Comprehensive exam, the student must discuss any scheduling concerns with the Academic Affairs Officer by the end of the first week of the quarter. The MPH Exam Committee will make its best efforts to accommodate these concerns in planning the date and time of the exam.
Master of Public Health – Specialization in Epidemiology

Students with no prior clinical doctorate

ALL courses must be taken for a letter grade.

Minimum Units Required: 68

At least 8 units must be in the 400 series. Eight (8) units can be taken outside the Epidemiology department with the consent of the adviser and by blue petition

**BIOSTAT 100A, COM HLT 100, ENV HLT 100, and HPM 100 waiver exams**: Students meeting eligibility requirements may waive out of a school core course by passing the waiver exam. Students who waive out of a core course must make up the units with a graduate-level elective course taken for a letter grade.

**School Requirements:**
- BIOSTAT 100A 4 Introduction to Biostatistics
- COM HLT 100 4 Behavioral Science & Health Education
- ENV HLT 100 4 Introduction to Environmental Health
- EPIDEM 200A 6 Epidemiologic Methods I
- HPM 100 4 Health Services Organization

**Department Requirements:**
- BIOSTAT 100B 4 Introduction to Biostatistics
- EPIDEM 200B 6 Epidemiologic Methods II
- EPIDEM 200C 6 Epidemiologic Methods III
- EPIDEM 220 4 Principles in Infectious Disease Epidemiology
- EPIDEM 400 4 Field Studies in Epidemiology
- EPIDEM 413 2 Methods of Scientific Communication
- 2 Chronic Disease Epidemiology Course
- 2 Data Management Course
The student fulfills the remaining units with courses selected from the following. The Department may also announce new courses during the Academic Year. Please consult with your advisor and the Registrar’s Schedule of Classes each quarter to confirm course offerings. Eight (8) of these units can be taken outside of the Epidemiology department with the consent of the adviser and by blue petition. Students must attach a course description or syllabus when submitting the petition request.

- Bioterrorism: Epidem C275
- Cancer Epidemiology: Epidem 242, 243, 244, 245
- Cardiovascular Epidemiology: Epidem 240
- Data Management and Analysis: Epidem M403, 404, 410
- Environmental Epidemiology: Epidem 260
- Genetic Epidemiology: Epidem 249
- Global Epidemiology: Epidem 273, 420
- Infectious Disease: Epidem 227, 228, 230, 231, 232, 233
- Injuries: Epidem M252
- Methods, Quantitative: Epidem M204, M211, M212
- Methods, Other: Epidem M216, M218, M213
- Nutritional Epidemiology: Epidem M254, 257, M258
- Occupational Epidemiology: Epidem M261, 265
- Reproductive Epidemiology: Epidem 267
- Social and Behavioral Epidemiology: Epidem 268, 270, M272, 412

Remember to satisfy the School Requirements of taking at least 8 units at the 400-level. You may use *Epidem 400: Field Study in Epidemiology* (4 units) to count towards the 8 units in the 400-level.
Master of Public Health – Specialization in Epidemiology

Students with a US clinical doctorate
or
Students currently enrolled in a US medical school

All courses must be taken for a letter grade.

Minimum Units Required: 56

At least 8 units must be in the 400 series.

**BIOSTAT 100A, COM HLT 100, ENV HLT 100, and HPM 100 waiver exams:** Students meeting eligibility requirements may waive out of a school core course by passing the waiver exam. Students who waive out of a core course must make up the units with a graduate-level elective course taken for a letter grade.

<table>
<thead>
<tr>
<th>School Requirements</th>
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</thead>
<tbody>
<tr>
<td>BIOSTAT 100A</td>
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</tr>
<tr>
<td>COM HLT 100</td>
<td>4</td>
<td>Behavioral Science &amp; Health Education</td>
</tr>
<tr>
<td>ENV HLT 100</td>
<td>4</td>
<td>Introduction to Environmental Health</td>
</tr>
<tr>
<td>EPIDEM 200A</td>
<td>6</td>
<td>Epidemiologic Methods I</td>
</tr>
<tr>
<td>HPM 100</td>
<td>4</td>
<td>Health Services Organization</td>
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</tbody>
</table>

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<thead>
<tr>
<th>Department Requirements</th>
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<tbody>
<tr>
<td>BIOSTAT 100B</td>
<td>4</td>
<td>Introduction to Biostatistics</td>
</tr>
<tr>
<td>EPIDEM 200B</td>
<td>6</td>
<td>Epidemiologic Methods II</td>
</tr>
<tr>
<td>EPIDEM 200C</td>
<td>6</td>
<td>Epidemiologic Methods III</td>
</tr>
<tr>
<td>EPIDEM 400</td>
<td>4</td>
<td>Field Studies in Epidemiology</td>
</tr>
<tr>
<td>EPIDEM 413</td>
<td>2</td>
<td>Methods of Scientific Communication</td>
</tr>
</tbody>
</table>
The student fulfills the remaining units with courses selected from the following. The Department may also announce new courses during the Academic Year. Please consult with your advisor and the Registrar’s Schedule of Classes each quarter to confirm course offerings.

- Bioterrorism: Epidem C275
- Cancer Epidemiology: Epidem 242, 243, 244, 245
- Cardiovascular Epidemiology: Epidem 240
- Data Management and Analysis: Epidem M403, 404, 410
- Environmental Epidemiology: Epidem 260
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- Global Epidemiology: Epidem 273, 420
- Infectious Disease: Epidem 227, 228, 230, 231, 232, 233
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- Occupational Epidemiology: Epidem M261, 265
- Reproductive Epidemiology: Epidem 267
- Social and Behavioral Epidemiology: Epidem 268, 270, M272, 412

Remember to satisfy the School Requirements of taking at least 8 units at the 400-level. You may use Epidem 400: Field Study in Epidemiology (4 units) to count towards the 8 units in the 400-level.
**MPH Report (Epidem 400: Field Studies) Guidelines**

The Epidemiology 400: Field Studies Approval Form must be completed by the student, signed by faculty adviser. A Field Studies project may take longer than a term to complete in which case students are advised to enroll in Epidemiology 400 in the term when they can submit the MPH report for a grade. Field work must be approved before initiating the project; the approval form must be submitted to the Department by the 2nd Friday of the term of enrollment. **IMPORTANT:** The Graduate Division does not allow Incomplete grades in the final term of enrollment without a justification letter from the course instructor. Only extenuating circumstances will be considered and are subject to approval.

The final copy of the MPH Report must be submitted to both the instructor and the Department. The MPH report should demonstrate (1) understanding of an epidemiologic topic and (2) analytic competence of candidates in either infectious or general epidemiology. **Select one option** as listed below.

**Analyze and write up existing data:**

The student can define a research problem and, using existing data, carry out the necessary data analysis to answer or illuminate the problem. The report based on a project of this type should follow usual research paper format.

**Carry out an original research project:**

The student can define a research problem and design and carry out the research necessary to answer or illuminate the problem posed. This can be a laboratory or other type of study (e.g., medical records, vital records, interview, etc.). The report based on a project of this type should follow the usual research paper format.

**Literature review of a disease (health problem) and development of a proposal for relevant epidemiologic study:**

This should consist of an in-depth analysis of existing literature leading to the development of a research proposal. The proposal should include objectives, rationale, methods (clearly and explicitly developed) and an appropriate discussion of projected analyses. The project should also be feasible, particularly with respect to human subjects review.

**Some, but not all, internships will provide the opportunity to develop an MPH report in one of the above formats. Please consult your adviser and the Department Internship Coordinator before starting an internship.**
## MPH Competencies for Epidemiology Majors

Upon graduation, a student with an MPH majoring in epidemiology should be able to do the following:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Source of Training and Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Understand how to assess, critique, and interpret epidemiological studies, including their strengths and weaknesses</strong></td>
<td>Epi 200A, 200B, 200C*</td>
</tr>
<tr>
<td><strong>2. Describe a public health problem in terms of magnitude, population, time and place.</strong></td>
<td>Epi 200A, 200B, 200C*</td>
</tr>
<tr>
<td><strong>3. Identify key sources of data for epidemiologic purposes</strong></td>
<td>Epi 200A; 200B; Epi 410, Epi 403, or Epi 404</td>
</tr>
<tr>
<td><strong>4. Identify the principles and limitations of public health screening programs</strong></td>
<td>Epi 220*</td>
</tr>
<tr>
<td><strong>5. Apply the basic terminology and definitions of epidemiology, including definitions of populations, sources of bias, principles of causation for morbidity and mortality (both infectious and chronic), and risk and protective factors</strong></td>
<td>Epi 200A, 200B, 200C, Epi 220, Chronic Disease Epidemiology course*</td>
</tr>
<tr>
<td><strong>6. Calculate basic epidemiology measures</strong></td>
<td>Epi 200A, 200B, 200C*</td>
</tr>
<tr>
<td><strong>7. Draw appropriate inferences from epidemiologic data</strong></td>
<td>Epi 200A, 200B, 200C*</td>
</tr>
<tr>
<td><strong>8. Effectively communicate orally and in writing epidemiologic information to lay and professional audiences</strong></td>
<td>Epi 403, Epi 404, or Epi 410; Epi 413; Epi 400 Field Studies*</td>
</tr>
<tr>
<td><strong>9. Observe ethical guidelines in the collection, maintenance, use and dissemination of epidemiologic data</strong></td>
<td>Epi 403, Epi 404, or Epi 410; Epi 413*</td>
</tr>
<tr>
<td><strong>10. Identify, explain and apply epidemiologic principles and methods in a research, public health, or community setting</strong></td>
<td>Epi 200A, 200B, 200C, Epi 220, Chronic Disease Epidemiology course, Epi 400 Field Studies*</td>
</tr>
</tbody>
</table>

Evaluation of competencies to be demonstrated through:
- Course exams and assignments
- Epi 400: project summary and report

*Also evaluated in the MPH Comprehensive Exam
Doctor of Philosophy Degree (PhD)

The PhD degree is intended for students who wish to pursue a career in research and teaching.

Admission

In addition to the University minimum requirements, the department requires (1) outstanding performance on the Graduate Record Examination (GRE); (2) at least a 3.0 junior/senior grade-point average and at least a 3.5 grade-point average in graduate studies with a combined GPA of no less than 3.56 in Epidem 200A, 200B, and 200C with no less than a B+ in a single course in the series; and (3) approval by the department admissions committee, an academic adviser, and the department chair. Admission is decided by a vote of the faculty and is subject to approval by the School and Graduate Division.

Students interested in applying to the PhD program already registered at UCLA and enrolled in Public Health should take the following steps: (1) identify and secure an eligible faculty willing to serve as their doctoral adviser, (2) complete a Blue Petition stating request to transfer to PhD, proposed adviser, and effective term, (3) submit the approved blue petition (signed by proposed doctoral adviser) with a current CV and a clear statement of purpose, outlining goals and career objectives as they relate to the focus of the doctoral program. The transfer packet (Blue Petition, CV, and Statement) must be submitted to the departmental Academic Affairs Officer in room 71-254A CHS. Please do not submit petitions to transfer to the doctoral program directly to the Central Student Affairs Office.

Advising

Advisers are matched with entering doctoral students during the admissions process. Student and adviser together agree upon a study list for each academic quarter; any subsequent alterations must be approved by the doctoral adviser. All courses to be taken must be approved by the doctoral adviser.

Within the first three quarters of study, students file the MS Equivalency Form and Doctoral Form 1: Petition for Establishment of Three-Member Guidance Committee and Study in Major and Additional Area of Specialization for the PhD in Epidemiology. The guidance committee comprises three members including the student's adviser as chair of the committee. On this form, students will also list the courses to be taken for the additional area of specialization which must be approved by the student's adviser and the department chair.

Students must submit the MS Equivalency Form and Doctoral Form 1 to be eligible to take the Written Doctoral Qualifying Examination.

Course Requirements

Doctoral students are required to complete at least two years of academic residence (registration and enrollment) in graduate status at the University of California, including one year, ordinarily the second, in continuous residence at UCLA. If the master’s degree was earned at UCLA, one year of the residence requirement may have been met towards the doctorate. In most cases, however, a longer period of academic residence is necessary, and from three to five years is generally considered optimal.

PhD students must fulfill training equivalent to the course requirements for the MS Degree in Epidemiology. PhD students may petition to apply previous post-baccalaureate coursework to establish MS equivalency. Courses eligible for this consideration must be taken for a letter grade at a US institution. Students wishing to waive-out of the Biostatistics 100A requirement, must successfully pass the Biostatistics 100A waiver exam.

Additionally, PhD students must take Epidem M204 (4 units), an additional statistics course beyond the MS requirements (4 units), one course on pathobiology (4 units), and at least three quarters of Epidem 292 (2 units per quarter). The statistics and pathobiology courses must be approved by the doctoral adviser.
Finally, the student must take at least 12 units of graduate-level courses (excluding 500 level courses) outside the Department of Epidemiology. The 12 units must be selected with the approval of the doctoral adviser. Students with prior post-baccalaureate coursework may petition for substitution of part or the entire 12-unit requirement.

The Graduate Division does not allow "Incomplete" grades in the final term of enrollment without a justification letter from the course instructor. Only extenuating circumstances will be considered and are subject to approval.

All courses excluding the Advanced Doctoral Seminar (Epidem 292) and the pathobiology course must be taken for a letter grade. Epidem 292 and the pathobiology course may be taken for S/U grading. Recommendation for the degree is based on the attainments of the candidate rather than on the completion of specific courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>EPIDEM M204</td>
<td>4</td>
<td>Logic, Causation, and Probability</td>
</tr>
<tr>
<td>EPIDEM 292</td>
<td>2</td>
<td>Advanced Seminar: Epidemiology</td>
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<tr>
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<td>Advanced Seminar: Epidemiology</td>
</tr>
<tr>
<td>Pathobiology Course</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Additional Statistics course</td>
<td>4</td>
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</tr>
</tbody>
</table>

Twelve (12) units of graduate-level courses (excl. 500 series) outside of Epidemiology

**Advanced Doctoral Seminar**

All doctoral students must enroll in *Epidem 292: Advanced Seminar* in three quarters of their tenure. Students must enroll in at least one of the three prior to their Oral Qualifying Exam (preliminary proposal) during which time they must present their preliminary proposal. Students are then required to present a second time in a later doctoral seminar after they have advanced as preparation for their Final Oral Exam (dissertation defense).

Enrollment in seminars as a Masters student is not applicable to this requirement as a doctoral student.

**Teaching Experience**

Teaching experience is recommended but not required for the doctoral degree.

**Written and Oral Qualifying Examinations**

To advance to candidacy, students must pass the departmental Written Doctoral Qualifying Examination and the Oral Qualifying Examination. Normally for the written doctoral examination no more than one re-examination is allowed. A doctoral committee is nominated and submitted to the Graduate Division and, if approved, administers the oral qualifying examination after successful completion of the written examination. All committee members must participate in the Oral Qualifying Examination.

**Advancement to Candidacy**

After completing the course requirements, and passing both the written doctoral examination and the oral qualifying examination, the student may be advanced to candidacy and complete work on a dissertation in the principal field of study.
**Final Oral Examination (Defense of the Dissertation)**

The Final Oral Exam is required of all students in the program. All committee members must participate in the Final Oral Examination and Dissertation Defense.

**The Dissertation**

The Dissertation generally consists of at least three publishable papers. The dissertation must be submitted to all certifying committee member two weeks prior to the dissertation defense. All certifying committee members must approve the dissertation before the defense is held.

**Time-to-Degree**

Maximum allowable time for the attainment of the degree is 24 quarters of enrollment or eight years. However, the approved normative time-to-degree is 18 quarters (six years). This limitation includes quarters enrolled in previous graduate study at a UC campus prior to admission to the doctoral degree program and leaves of absence.

It is expected that students will complete coursework by the end of the third year in residence (nine quarters); complete written and oral examinations and advance to candidacy latest by the middle of the fourth year in residence (11 quarters); and complete the dissertation and defense latest by the end of the sixth year (18 quarters). Students must advance to candidacy by their 12th quarter to be eligible for support from Department funds. After doctoral advancement, students are eligible for department support for up to nine quarters.
Minimum Standards for Doctoral Committees in Epidemiology, Effective 2016 Fall

1. All doctoral committees require a minimum of four members among whom a minimum of three members must hold current UCLA Academic Senate faculty appointments limited to Professor (any rank), Professor or Associate Professor Emeritus, Professor in Residence (any rank), or Acting Professor or Acting Associate Professor. Two of the three doctoral committee members from UCLA must hold the rank of professor or associate professor (regular or in-residence series).

2. One of the three UCLA members may be an Adjunct Professor (any rank) or Professor of Clinical X (any rank) who is certified and approved by the Committee on Degree Programs (CDP).

3. The Chair always must hold a current Academic Senate faculty appointment at UCLA in the same department or interdepartmental program as the student.

4. Two of the four doctoral committee members must hold an appointment in Epidemiology at UCLA.

5. Only one committee member may hold an Academic Senate faculty appointment or its academic equivalent at another accredited university or college (UC or non-UC) without need of an exception from the Graduate Division.

6. All committee members read, approve, and certify the dissertation. Under unusual circumstances, a department or interdepartmental program may petition the Committee on Degree Programs via the Graduate Division for an exception that would allow three committee members (including the Chair and at least one other UCLA member) to serve as certifying members in lieu of the full committee. An approved exception would apply to all doctoral committees of graduate students in that department or interdepartmental program for a period of up to ten years.

7. All committee members must certify that the fairness, equity, and academic integrity of the oral qualifying examination and the final oral examination (dissertation defense) have been preserved by the doctoral committee.

8. Only one committee member (never the Chair or Co-Chair) may participate remotely in an oral qualifying examination or final oral examination (defense of the dissertation). Remote participation must be a matter of necessity rather than convenience. The student must petition the committee chair in advance of the examination to allow one member to participate remotely; the committee Chair must provide written approval to the student ahead of the examination. The technology required for remote participation must allow for the participant to see/be seen by and hear/be heard by all committee members and have access to visual materials simultaneously. Although no exception petition will be required for one committee member participating remotely, the department/program must notify the Graduate Division of the remote participation within 14 business days of the examination.
# PhD Competencies for Epidemiology Majors

Upon graduation, a student with a PhD in epidemiology should be able to do the following:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Source of Training and Evaluation</th>
</tr>
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<tbody>
<tr>
<td>12. Locate, identify, critically evaluate, and synthesize current epidemiologic literature and identify avenues for new research and/or theoretical development</td>
<td>Epi 200A, 200B, 200C, Epi M204, Epi 292, Proposal/Thesis*</td>
</tr>
<tr>
<td>13. Describe a public health problem in terms of magnitude, population, time and place</td>
<td>Epi 200A, 200B, 200C, Epi 220, Chronic disease required elective course; Proposal/Thesis*</td>
</tr>
<tr>
<td>14. Identify key sources of data for epidemiologic purposes</td>
<td>Epi 200A; Epi 200B; Epi 403, Epi 404, or Epi 410; Epi 292, Proposal/Thesis</td>
</tr>
<tr>
<td>15. Identify the principles and limitations of public health screening programs</td>
<td>Epi 220*</td>
</tr>
<tr>
<td>16. Explain the principles of pathological processes that underlie human morbidity and mortality</td>
<td>Required pathobiology course, Epi 220, Chronic disease required elective course*</td>
</tr>
<tr>
<td>17. Demonstrate expertise in applying terminology and definitions used in epidemiology, including definitions of populations, bias, principles of causation for both infectious and chronic morbidity and mortality, and risk and protective factors.</td>
<td>Epi 200A, 200B, 200C, Epi M204, Epi 220, Chronic disease required elective course, Epi 292, Proposal/Thesis*</td>
</tr>
<tr>
<td>18. Demonstrate expertise in advanced epidemiologic research methods (including research design and implementation, data analysis and statistics) and apply these methods to conduct hypothesis-testing research in the student's own area of research</td>
<td>Required methods courses: Epi 200A 200B, 200C, Epi M204; Required statistics courses: Multivariate Statistics + 1 additional course; Proposal/Thesis*</td>
</tr>
<tr>
<td>19. Formulate a research question on an important epidemiologic topic, design a rigorous and original empirical study to answer it, conduct that study, interpret the results, and draw conclusions</td>
<td>Required methods courses: Epi 200A 200B, 200C, Epi M204; Required statistics courses: Multivariate Statistics + 1 additional course; Proposal/Thesis</td>
</tr>
<tr>
<td>20. Make comprehensible and articulate presentations at national and international professional conferences and effectively communicate, both orally and in writing, epidemiologic information to lay and professional audiences</td>
<td>Epi 403, Epi 404 or Epi 410; Epi 292, Proposal/Thesis</td>
</tr>
<tr>
<td>21. Explain the principles of research ethics and apply these principles to specific research projects, and be able to identify and resolve the specific ethical considerations likely to arise in the student's area of research</td>
<td>Epi 292, Proposal/Thesis</td>
</tr>
</tbody>
</table>

Evaluation of competencies to be demonstrated through:

- Course exams and assignments.
- Doctoral Committee approval of dissertation which will demonstrate expertise in the competencies listed above

*Also evaluated in the departmental qualifying exam
Important Academic Information

Academic Integrity

Extracted from the UCLA Office of the Dean of Students

UCLA is a community of scholars. In this community, all members including faculty, staff and students alike are responsible for maintaining standards of academic honesty. As a student and member of the University community, you are here to get an education and are, therefore, expected to demonstrate integrity in your academic endeavors. You are evaluated on your own merits. Cheating, plagiarism, collaborative work, multiple submissions without the permission of the professor, or other kinds of academic dishonesty are considered unacceptable behavior and will result in formal disciplinary proceedings usually resulting in suspension or dismissal.

Forms of Academic Dishonesty

As specified in the UCLA Student Conduct Code, violations or attempted violations of academic dishonesty include, but are not limited to, cheating, fabrication, plagiarism, multiple submissions or facilitating academic dishonesty (see below for detailed definitions).

While you are here at UCLA, you may find yourself in a situation where cheating seems like a viable choice. You may rationalize to yourself that “Everyone else does it”…Well, they don’t. And will that matter when YOU get caught? NO! If you are unsure whether what you are considering doing is cheating, just ask yourself …how would you feel if your actions were public, for anyone to see? Would you feel embarrassed or ashamed? If the answer is yes, that’s a good indicator that you are taking a risk and rationalizing it to yourself.

If after reviewing the information below, you are still unclear about any of the items – don’t take chances, don’t just take your well-intentioned friend’s advice – ASK your TA or your Professor. Know the rules - Ignorance is NO defense. In addition, avoid placing yourself in situations which might lead your TA or Professor to suspect you of cheating. For example, during an exam don’t sit next to someone with whom you studied in case your answers end up looking “too similar.”

Alternatives to Academic Dishonesty

Seek out help – meet with your TA or Professor, ask if there is special tutoring available.
Drop the course – can you take it next quarter when you might feel more prepared and less pressured?
Ask for an extension – if you explain your situation to your TA or Professor, they might grant you an extended deadline.
See a counselor at Student Psychological Services, and/or your school, college or department – UCLA has many resources for students who are feeling the stresses of academic and personal pressures (see list below)

Remember, getting caught cheating affects more than just your GPA. How will you explain to your parents, family and friends that you have been suspended or dismissed? How will it affect your financial aid award and/or scholarship money? Will you be required to, and be able to pay back that money if you are no longer a student? If you live in the residence halls, where will you go if you are told you can no longer live there?

You have worked very hard to get here, so don’t cheat! If you would like more information, please see the Dean of Students’ Office in 1206 Murphy Hall, call (310) 825-3871, or visit www.deanofstudents.ucla.edu.
Important terms to fully understand

Cheating
- Unauthorized acquiring of knowledge of an examination or part of an examination
- Allowing another person to take a quiz, exam, or similar evaluation for you
- Using unauthorized material, information, or study aids in any academic exercise or examination – textbook, notes,
  - Formula list, calculator, etc.
- Unauthorized collaboration in providing or requesting assistance, such as sharing information
- Unauthorized use of someone else’s data in completing a computer exercise
- Altering a graded exam or assignment and requesting that it be regraded

Plagiarism
- Presenting another’s words or ideas as if they were one’s own
- Submitting as your own through purchase or otherwise, part of or an entire work produced verbatim by someone else
- Paraphrasing ideas, data or writing without properly acknowledging the source
- Unauthorized transfer and use of someone else’s computer file as your own
- Unauthorized use of someone else’s data in completing a computer exercise

Multiple Submissions
- Submitting the same work (with exact or similar content) in more than one class without permission from the instructor to do so. This includes courses you are currently taking, as well as courses you might take in another quarter

Facilitating Academic Dishonesty
- Participating in any action that compromises the integrity if the academic standards of the University; assisting another to commit an act of academic dishonesty
- Taking a quiz, exam, or similar evaluation in place of another person
- Allowing another student to copy from you
- Providing material or other information to another student with knowledge that such assistance could be used in any of the violations stated above (e.g., giving test information to students in other discussion sections of the same course)

Fabrication
- Falsification or invention of any information in an academic exercise
- Altering data to support research
- Presenting results from research that was not performed
- Crediting source material that was not used for research

Official Materials from the University

It is the student’s responsibility to observe posted deadlines, and take any action that is required. This is especially important for work-study, financial aid, traineeships, filing deadlines, etc. For the most current deadlines, go to the Graduate Division website https://grad.ucla.edu or the Registrar’s online schedule and calendar at http://www.registrar.ucla.edu/calendar/.

In some cases, the Department will have a deadline earlier than what is posted by the Graduate Division. Please go to: https://epi.ph.ucla.edu/events or consult the Department SAO for department deadlines.
**Student Services**

**Faculty Adviser**

Students are assigned a faculty adviser prior to the beginning of their academic program. An attempt is made to match the student with an adviser on the basis of similar academic interests. Occasionally, a student may wish to change advisers. A blue student petition is used for this request. Approval of both faculty members involved is obtained by the student before she/he submits the petition to the Academic Affairs Officer, who will submit the request for departmental approval. The approved petition is then recorded with the School’s Student Affairs Office.

**Fielding School of Public Health**

The Central Student Affairs Office provides oversight and guidance of school-wide and departmental graduate program affairs, including admissions processing, degree processing, class scheduling, funding, orientation and graduation preparations, and general counseling to prospective, new and continuing students. Hours and location: Monday through Friday 10:00 am – 3:00 pm, room A1-269 CHS. Their phone number is (310) 825-5524

**Department of Epidemiology**

Joy Miller, Room 71-254A CHS, is the Academic Affairs Officer for the Department of Epidemiology. You may also reach Joy at jdmiller@ph.ucla.edu.

**Internship and Career Services**

Internship Coordinator for Epidemiology, Azadeh Terceman aterceman@ph.ucla.edu facilitates placement of MPH students in academic and non-academic internships. Some of the services provided include individual career coaching (i.e. how to choose the best internship based on long term career goals), resume and cover letter review, and mock interviews. Group meetings and workshops are offered every quarter.

The Career Services Office is an invaluable resource for your career development. Kristy Sherrer, FSPH Director of Career Services develops and coordinates career services for all FSPH students. This service builds comprehensive programs that will open doors to diverse career pathways, prepare students to effectively enter the job market, and make connections to public health alumni, employers and the community. This will allow for the building and maintaining of strong professional relationships to support a lifetime of career success. FSPH students are encouraged to make a career advising appointment with Kristy to discuss topics including resume and cover letter writing, career exploration, job search strategies, effective networking and mock interviews. Students can schedule appointments with Kristy through BruinView. To get the most out of this and other career-related resources, please create your BruinView account early and select Counseling Appointments when you are ready to meet with Kristy. Kristy can also be reached at ksherrer@ph.ucla.edu.
Advancement to Candidacy

Master's Degree

Advancing to candidacy is a requirement for all MS and MPH degree candidates. Petitions to advance to candidacy are distributed at the annual graduation workshop. Petitions are also available in the Student Affairs Office (Room A1-269) forms are to be returned to the Department Academic Affairs Officer completed by the student as per the directions of the form and any special instructions given by the Student Affairs Office Staff, and signed by your adviser.

Please note: Students wishing to graduate in spring quarter must petition to advance to candidacy by February of that same year. The deadline for Advancement to Candidacy for fall and winter quarters is generally the first week of that given quarter. The Student Affairs Office regularly posts the specific due dates. It is the individual student’s responsibility to meet all deadlines.

Doctoral Degree

Advancing to candidacy is also a requirement for those in the PhD program. All doctoral students must complete the MS Equivalency form and Doctoral Forms 1, 2 and 3 (forms can be obtained in the Student Affairs Office or in the Dept of Epidemiology) before officially nominating their doctoral committees. Committee nomination and reconstitution forms must be submitted to the Department Academic Affairs Officer or the School’s Central Student Affairs Office. Committee forms submitted directly to the Graduate Division will not be reviewed for approval. Doctoral students should not schedule a date for the proposal until the official doctoral committee has been approved by Graduate Division (please allow at least 10 business days for committee approval).

Please check with the staff in the Student Affairs Office for more information regarding this process.

Sequence of Courses

Incoming Epidemiology majors must take Epidem 200A, Biostat 100A in the fall quarter for which they are enrolled. In the winter term, first year students should plan on taking Epidemiology 200B and Biostatistics 100B. Students are strongly encouraged to also consider Epidem 220, Epidem 413, or HPM 100. All entering MPH students must take a data management course by the winter quarter of their first year. Students will complete their first year by taking Epidemiology 200C in the spring along with courses recommended by the academic advisor.

MPH students should complement their first year courses with EHS 100, CHS 100 or HPM100 as their schedule allows.

All students are encouraged to consult their academic advisers for suggestions and recommendations on which electives to take. Students who wish to take the Epidemiology Core Curriculum (Epidemiology 200ABC) in a different sequence must have prior approval from their adviser.

Course Substitutions and Waivers

Prior to the beginning of the fall quarter, arrangements for the Biostat 100A, EnvHlt 100, HPM 100, or ComHlt 100 waiver examinations are made with the respective department. Except for ComHlt 100, examinations are usually given at the beginning of fall quarter with signups made with the appropriate department at least one week before the start of the quarter.
Blue Petitions

A “Blue Petition” is a form submitted to explain a student's need or desire to be exempted from any rule or regulation of the University. It is the only way to obtain formal approved from the department, the school, the Registrar or whoever has authority over the particular request. Complete and submit petitions as soon as the need for one is determined.

Grading

UCLA grades for graduate students, are A, B, C, F, and I. Grade point averages are computed on the basis of 4 points for an “A”, 3 points for a “B”, 2 points for a “C”, and 0 points for an “F”. You must maintain at least a 3.0 average to avoid probation. You must also have a 3.0 average in the required courses. If you are on probation for two consecutive quarters, you are subject to dismissal from the University.

The grade “I” (Incomplete) may be assigned if you did not complete all of the course material and the material completed was of passing quality. The “I” must be arranged before the end of the course with the instructor. You should have a written agreement with the instructor detailing what is needed to complete the course. A passing grade is added to the transcript provided students satisfactorily complete the course work by the end of the next full term in academic residence. If the work is not completed by the next full term in residence the “I” grade automatically lapses to an “F” or “U” (unsatisfactory) as appropriate.

IMPORTANT: The Graduate Division requires a justification letter from instructors to remove Incompletes grades assigned in the final term of enrollment. Incomplete grades in the final term of enrollment are subject to approval by the Graduate Division and may adversely affect a degree conferral. Incomplete grades should only be requested for extenuating circumstances.

English as a Second Language

All non-native speakers of English new to UCLA are required to take the English as a Second Language Placement Exam (ESLPE). Students may be exempt from this requirement if they did their undergraduate course work in the USA. For more information on such exemption, contact esl@ucla.edu. You may sign up to take the exam at www.wp.ucla.edu under Placement Exam Schedule. Otherwise students may be required to take up to three courses of the English 33 series according to their performance on this examination. Please do not delay. If needed, ESL course(s) are designed and intended to facilitate your studies here at UCLA. If you do not fulfill your ESL requirement, you will not be permitted to graduate. Students may only take the exam once! Retakes will not be recognized by the Department.

Students from non-English speaking countries are strongly encouraged to take the Test of Oral Proficiency (TOP) as early as possible if they wish to be eligible for Teaching Assistantships opportunities across campus. The TOP is administered four times a year. While newly admitted students are encouraged to take the exam after they have had interaction with native speakers, they must take the TOP before the quarter they plan to teach. The TOP is administered four times a year. More information is available at www.oid.ucla.edu/training/top.

Financial Assistance

As a major center for graduate study, UCLA offers a percentage of its qualified graduate student's substantial support through several types of financial assistance. Awards are based on either academic merit or financial need, but the two types are not mutually exclusive. Students interested in applying for
financial assistance should read carefully the information contained in the Financial Support portion of the Graduate Division’s website (www.grad.ucla.edu), most notably “UCLA Financial Support for Continuing Students”. This site also provides information on student employment opportunities as well as extramural support.

Ensuring that our school is accessible and affordable to outstanding students from all communities is one of our highest priorities and is fundamental to our excellence. Students are strongly encouraged to meet with Michelle Garcia-Navarro, FSPH Director of Admissions and Financial Aid garciana@ph.ucla.edu to learn more about school-wide funding programs.

The Department of Epidemiology offers the Fellowship in Epidemiology each year based on both merit and need. Applications are solicited in spring and announcements are made in summer for support in the coming year. Through this application, students will have the opportunity to request consideration for teaching appointments offered by the Department.

Within Epidemiology are research traineeships which provide fee and stipend support. Please consult the Department’s Training Programs page http://epi.ph.ucla.edu/academics/programs for more information.

Finally, the Department sends email notifications of various awards and funding opportunities as they arise. The importance of carefully reading the publications provided and meeting the stated deadlines cannot be overstated.

**General Student Information**

**Student Photo-ID Cards**

The Bruin Card, a versatile identification system not only provides a photo-student ID, but can also be coded as a debit card (by making a deposit in your Bruin Card account), good for transactions at local and UCLA shops and businesses. It will also function as a library card, a special events card, and other convenient options as well. These will be issued as part of the orientation event, and you will receive more details at that time about how to obtain your Bruin Card (please wait until orientation or after your registration fees are paid for fall quarter). If you have not obtained your Bruin Card by the first week of class you may go to 123 Kerckhoff Hall to request one.

**Access to Computer Facilities**

The School of Public Health operates a microcomputer lab for student use. There are two microcomputer rooms for students to access Email, to search library databases, or to surf the Internet. The lab assistant assigns account numbers to interested students holding a student identification card, and will assist in using the software.

The computer lab is located in CHS A1-241 and the hours are 8.00am to 8.00pm Monday through Thursday and 8.00am to 6.00pm Friday. The computer lab is closed on Saturday and Sunday. In addition, there is a classroom-size lab often used to supplement lectures with hands-on experience. The lab is available only at a time that there is not a class in session. The lab hours are 8:00am to 5:00pm Monday through Friday and are closed on weekends.

The School also has dedicated computer stations for public health students in the Graduate Student Reading Room of the Louise M. Darling Biomedical Library.
Students conducting special research projects for specific faculty can obtain access to the University "backbone" computer for more powerful operations. Students who own a personal computer should purchase the Bruin On-Line software at the Ackerman Union student store. This will enable them to access Email, the Internet, and on-line library databases from home. You should have a modem that is at least 28,800 baud for optimum performance.

**Email Account**

To set up your Bruin Online account go to a designated “new user terminal” on campus with your UCLA ID number and date of birth. The terminals are located in the OAC Commons computer lab in 4328 Mathematics Science Annex, CLICC Lab in Powell Library, or the Student Technology Center by Delta Terrace (in Sunset Village). You can also establish an account by telnetting to the machine access.ucla.edu and logging in as new user. For more information on account establishment, see the BOL Accounts page at [http://www.bol.ucla.edu/](http://www.bol.ucla.edu/).

Bruin Online is available for PC/Windows or Macintosh computers via dial-up, campus work stations, or from dorm rooms. To use Bruin Online from home you may purchase software from The UCLA Store or the Student Technology Center for a nominal fee. If you already have Internet software, you may obtain configuration instructions from OAC Consulting or the BOL home page at [http://www.bol.ucla.edu/](http://www.bol.ucla.edu/).

Bruin Online also provides every Bruin Online user five megabytes of space to create a personal web page. We can provide a link to your personal web page on the Biostatistics current student web page.

**Library**

There are four main libraries you need to know about: the Young Research Library at the north end of campus, the College Library in Powell, the Biomedical Library in the Center for the Health Sciences, and the SEL/Engineering & Mathematics Library in the Math Sciences building. These libraries have all of the journals you should need in your program. There are Xerox machines available in the Biomedical Library for your use.

**Photocopies**

There are several copy machines on level 3 of the Biomedical Library which are available for students to use during library hours. A debit card can be purchased from dispensing machines located in the entry area of the library. Students also have an allotted amount of free photocopying at the Graduate Student Resource Center.

The Epidemiology Department has a copy machine located in room 76-087 CHS which is available for administrative personnel and faculty. Students in the Department of Epidemiology are also allowed to use this facility on a limited basis. A fee is charged (ask for the reimbursement log in the Epi office, Room 71-254 CHS). Please note the rules and procedures regarding machine use which are posted in the copy room.

**Student Mail Folders**

Epidemiology students have mail folders in the Department office, Room 71-254 CHS. All school mail and telephone messages will be put into these folders. Students should check their mail folders regularly. Please have journals and personal mail sent to your home address.
Health, Safety & Security

Student Health Services (SHS) is an outpatient clinic designed especially for UCLA students. Current registration card and photo ID is required for service since the service is supported by registration fees. Students may be seen by appointment or on a walk-in basis. Please note that most services are pre-paid by registration fees, but not all. Please contact SHS more detail and for the most up-to-date information visit their web site is http://www.studenthealth.ucla.edu.

For an appointment call (310)825-4073 (option 1) or via our online Appointment Request (https://www.studenthealth.ucla.edu/webappt/request.asp)

SHS is located at the Arthur Ashe Student Health and Wellness Center, formerly the Plaza Building, immediately adjacent to the Wooden Center.

The UCLA Police Department provides free escort service every day of the year from dusk until 1:00 a.m. Uniformed escorts specially trained UCLA students employed by the UCLA Police Department are available to walk students, faculty and staff members between campus buildings and local living areas or Westwood Village. To obtain an escort, call 794-WALK about 10 minutes before you need one.

Free Evening Van Service is provided for a safe and convenient mode of transportation around campus at night Monday through Thursday from 6 p.m. to midnight. For more information or a free brochure, call (310) 825-9800.

**Phone Numbers:**
- EMERGENCY 911
- Campus Emergency Information (800) 900-UCLA
- UCLA Police Department (24 hours) (310) 825-1491
- UCLA Emergency Room (310) 825-2111
- Campus Escort Service (dusk to 1am) (310) 794-WALK or 825-1493
- Peer Helpline (310) 825-HELP

For more information please see the UCLA web site at http://www.ucla.edu

Lockers

For lockers within the School of Public Health, please go to the Dean's Office Room 16-035 CHS. Lockers are assigned on a first come basis. Lockers must be renewed once a year at the beginning of Fall quarter.

Student Parking

To obtain quarterly deadline dates and information on how to apply for a parking permit, go to http://www.parking.ucla.edu or phone Parking & Commuter Service at (310) 825-9871, or in person at 555 Westwood Plaza.

Student Life

There are lots of ways to enrich your time at UCLA. There are many different cultures represented on campus, in the School, and in the Department. Explore these. Within the Department, there is the student-run Epidemiology Student Association (ESA). The School has an active student association, the Public Health Student Association (PHSA). PHSA is a good way of learning about other departments, as they have many of the same concerns that we do.

The Graduate Students Association of UCLA is the graduate student government for the nearly 10,000
graduate and professional students at the University of California, Los Angeles. GSA provides services and programs for UCLA graduate and professional students, and represents those students in administrative, campus, and statewide affairs. Every graduate or professional student at UCLA is automatically a member of the Graduate Students Association. In part, this means that $30.00 of each graduate or professional student's quarterly fees goes to GSA. These funds are used to provide programs and services for graduate and professional students at UCLA. There are many opportunities for participating in GSA-related activity, including departmental graduate representation, councils, forum, or running for one of the three GSA officer positions elected every Spring Quarter. Some representative appointments include stipends. For more information, go to [http://gsa.asucla.ucla.edu](http://gsa.asucla.ucla.edu) or call (310) 206-8512.

You may also find helpful information at The Guide to Life at UCLA web site: [http://www.studentlife.ucla.edu](http://www.studentlife.ucla.edu)
## Faculty in the Department of Epidemiology

Detailed Information on Faculty Research Interests and Publications is available at [http://www.ph.ucla.edu/epi/faculty.html](http://www.ph.ucla.edu/epi/faculty.html)

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<td>Onyebuchi Arah</td>
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<td>Lawrence Ash</td>
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<td>Emily Beeler</td>
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<td>George Berlin</td>
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<td>Alexandra Binder</td>
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<td>Brian Bradbury</td>
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<td>Marc Bultery Zbe2</td>
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<td>Catherine Carpenter</td>
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<tr>
<td>Rebecca Chun Chao</td>
<td><a href="mailto:chun.r.chao@kp.org">chun.r.chao@kp.org</a></td>
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<td>John Clemens</td>
<td><a href="mailto:jclemens@ucla.edu">jclemens@ucla.edu</a></td>
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<td>Thomas Coates</td>
<td><a href="mailto:tcoates@mednet.ucla.edu">tcoates@mednet.ucla.edu</a></td>
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Web Sites

Department of Epidemiology
http://epi.ph.ucla.edu/

UCLA Epidemiology on Facebook
https://www.facebook.com/UCLADepartmentOfEpidemiology

UCLA School of Public Health
www.ph.ucla.edu

UCLA Home Page
http://www.ucla.edu

Registrar’s Office
http://www.registrar.ucla.edu/

Graduate Division
http://www.gdnet.ucla.edu/

Program Requirements
http://www.gdnet.ucla.edu/departments.html

Schedule of Classes
http://www.registrar.ucla.edu/schedule

Financial Aid
http://www.fao.ucla.edu

Dashew Center for International Students and Scholars
http://www.internationalcenter.ucla.edu/

Graduate Student Resource Center
http://gsa.asucla.ucla.edu/gsrc/

Graduate Student Association
http://gsa.asucla.ucla.edu/

URSA
https://www.ursa.ucla.edu/

Bruin OnLine
http://www.bol.ucla.edu/

College of Letters of Science
http://www.college.ucla.edu

UCLA Financial Statement & Tax Fellowship Forms:
http://www.gdnet.ucla.edu/gss/library/taxintro.htm

CA Residency
http://www.registrar.ucla.edu/FAQ/residence.htm
Epidemiology Graduate Courses

200A. Methods I: Basic Concepts and Study Designs (6)
Lecture, six hours; discussion, four hours. Enforced requisite or co-requisite: Biostatistics 100A. Introduction to basic concepts, principles, and methods of chronic and infectious disease epidemiology. Letter grading.

200B. Methods II: Prediction and Validity (6)
Lecture, six hours; discussion, four hours. Enforced requisites: course 200A, Biostatistics 100A, 100B. Introduction to basic concepts, principles, and methods of chronic and infectious disease epidemiology. Letter grading.

200C. Methods III: Analysis (6)
Lecture, four hours; laboratory, two hours. Enforced requisites: courses 200A, 200B. Introduction to basic concepts, principles, and methods of epidemiologic data analysis. Letter grading.

203. Topics in Theoretical Epidemiology (2)
Lecture, two hours. Selected topics from current research areas in epidemiologic theory and quantitative methods. Topics selected from biologic models, epidemiologic models, problems in inference, model specification problems, design issues, analysis issues, and confounding. May be repeated for credit with consent of instructor. S/U grading.

M204. Logic, Causation, and Probability (4)

M211. Statistical Methods for Epidemiology (4)
(Same as Biostatistics M211 and Statistics M250.) Lecture, four hours. Preparation: two terms of statistics (such as Biostatistics 100A, 100B). Requisites: courses 200B, 200C. Concepts and methods tailored for analysis of epidemiologic data, with emphasis on tabular and graphical techniques. Expansion of topics introduced in courses 200B and 200C and introduction of new topics, including principles of epidemiologic analysis, trend analysis, smoothing and sensitivity analysis. S/U or letter grading.

M212. Statistical Modeling in Epidemiology (4)
(Same as Biostatistics M209.) Lecture, four hours. Preparation: two terms of statistics (three terms recommended). Recommended: course M204 or M211. Principles of modeling, including meanings of models, a priori model specification, translation of models into explicit population assumptions, model selection, model diagnostics, hierarchical (multilevel) modeling. S/U or letter grading.

M216. Applied Sampling (4)
(Same as Statistics CM248.) Lecture, three hours; discussion, one hour. Designed for upper division and graduate students in social or life sciences and those who plan to major in Statistics. Topics include methods of sampling from finite populations, sources of sampling and estimation bias, and methods of generating efficient and precise estimates of population characteristics. Practical applications of sampling methods via lectures and hands-on laboratory exercises. S/U or letter grading.

M218. Questionnaire Design and Administration (4)
(Same as Community Health Sciences M218.) Lecture, four hours. Requisites: courses 200B and 200C, or Community Health Sciences 211A and 211B. Design, testing, field use, and administration of data collection instruments, with particular emphasis on questionnaires. Letter grading.

220. Principles of Infectious Disease Epidemiology (4)
Lecture, three hours. Requisite: course 100 or 200A. Ascertainment of infection, transmission, and epidemiological parameters rather than clinical and pathological aspects. Specific diseases discussed in depth to illustrate epidemiologic principles. S/U or letter grading.

223. Biology and Ecology of Human Parasitic Diseases (4)
Lecture, four hours. Information on all aspects of parasitic organisms causing human disease, including their morphology, biology, means of diagnosis, and diseases they cause. From epidemiological
perspective, special emphasis on way in which parasites maintain themselves in nature and manner in which organisms are transmitted to people. Letter grading.

224. Zoonotic Diseases and Public's Health (4)
Lecture, four hours. Examination of wide variety of infectious disease agents (viruses, bacteria, and protozoan and helminth parasites) causing diseases in individuals and populations. Emphasis on how these diseases exist in natural environment, how they are transmitted from animals to humans, and methods for their prevention and control. Letter grading.

227. AIDS: Major Public Health Challenge (4)
Lecture, four hours. Requisites: courses 200A, 200B, and 200C (or 100), Biostatistics 100A or 110A. Presentation of epidemiologic, biologic, psychological, and clinical characteristics of AIDS and HIV-1 infection. Discussion of policy implications and intervention strategies. S/U or letter grading.

228. Biology of HIV (4)
Lecture, three hours. Preparation: two biology courses. Requisites: course 100, Biostatistics 100A. Overview of virologic and immunologic aspects of HIV disease for epidemiology or other health disciplines. Brief discussion of clinical manifestations and biosafety in laboratory. Letter grading.

229. Epidemiology of Foodborne Illnesses (4)
Lecture, four hours. Requisites: courses 200A, 200B, and 200C (or 100), Biostatistics 100A. Food poisoning is significant cause of morbidity and mortality in both developing and developed world. Examination of etiologic agents of food poisoning and factors specific to foods that allow them to become agents of disease transmission. S/U or letter grading.

230. Epidemiology of Sexually Transmitted Diseases (4)
Lecture, four hours. Requisites: courses 200A, 200B, and 200C (or 100). Sexually transmitted diseases; medical/biological aspects, epidemiology and control in developed and developing countries. S/U or letter grading.

231. Principles of Control of Infectious Diseases (4)
Lecture, four hours. Comprehensive study of tools for control of infectious diseases and application of these tools in public health programs to achieve epidemiologic impact on disease reduction, elimination, or eradication. Letter grading.

232. Methods in STI/HIV Epidemiology (2)
Lecture, two hours. Requisites: courses 200A, 200B, and 200C (or 100). Introduction to range of different methodologies used to collect data and conduct analysis on reproductive epidemiology topics, including methods that produce quantitative data and methods that produce qualitative data, with emphasis on use of methods appropriate for challenging and sensitive research topics such as sexual behavior, abortion use, and sexual abuse. Letter grading.

233. Communicable Disease Epidemiology in Corrections (2)
Lecture, two hours. Requisites: courses 200A and 200B (or 100). Overview of communicable disease epidemiology, public health program, and research issues specific to correctional population in U.S., including factors that contribute to transmission of communicable pathogens such as mental health, homelessness, and community reintegration. Legal and ethical issues related to healthcare among incarcerated and potential effects on community health. S/U or letter grading.

240. Cardiovascular Epidemiology (2)
Lecture, two hours. Topics include definition, pathogenesis, descriptive epidemiology, magnitude of risk factors, strategies for prevention, lipoprotein metabolism, and epidemiology of diabetes, hypertension, and chronic lung disease. Letter grading.

242. Cancer Epidemiology (4)

243. Molecular Epidemiology of Cancer (4)
Lecture, four hours. Requisite: course 242 or 295. Introduction to basic concepts and methodology of molecular epidemiology of cancer and review of current molecular epidemiologic research of cancer in recent medical and epidemiological literature. S/U or letter grading.
244. Research Methods in Cancer Epidemiology (2)
Lecture, two hours. Requisites: courses 200A, 200B, and 200C (or 100), Biostatistics 100A. Biologic, quantitative, philosophical, and administrative considerations in epidemiologic cancer research. Hypothesis specification and choice of study design. Uses of descriptive epidemiology, cohort studies, case control studies. Clustering, screening, and cancer control. Means of identifying subjects and controls. Design of instruments. Sources of bias and confounding. S/U or letter grading.

245. Epidemiology of Infections and Cancer (2)

246. Epidemiology of Aging (2)

249. Genetic Epidemiology I (2)
Lecture, two hours. Preparation: at least one course in epidemiology, biostatistics, and genetics. Basic concepts in emerging field of genetic epidemiology, with principal focus on genetic study of complex diseases, determining genetic contributions to disease, identifying genes, and characterizing their main effects and interactions with environmental factors. S/U or letter grading.

M252. Epidemiologic Methods in Violent Injury (4)
(Same as Environmental Health Sciences M211.) Lecture, four hours. Requisites: courses 200A, 200B, and 200C (or 100). Description and critical evaluation of epidemiologic methods in approaches to understanding incidence risk factors and prevention strategies of violence and violence-related injury. Letter grading.

M254. Nutritional Epidemiology I (4)
(Formerly numbered 254.) (Same as Community Health Sciences M251.) Lecture, two hours; discussion/laboratory exercise, one hour. Preparation: introductory biostatistics and epidemiology courses. Review of all aspects of contemporary nutrition sciences that require application of epidemiologic principles and methods, ranging from food-borne outbreak investigation to evidence-based regulatory assessment of health claims for foods. Experience in actual world of collecting, analyzing, and interpreting data related to nutrition and health or disease outcomes. S/U or letter grading.

260. Environmental Epidemiology (2 or 4)
Lecture, three hours. Requisites: courses 200A, 200B, and 200C (or 100). Epidemiologic methods applied to evaluation of human health consequences of environmental hazards. Topics include air pollution, pesticides, drinking water contaminants, use of GIS. Review of recently completed environmental studies published in peer-reviewed literature. S/U or letter grading.

M261. Occupational Epidemiology (4)
(Formerly numbered 261.) (Same as Environmental Health Sciences M260.) Lecture, three hours. Requisites for majors: courses 200A, 200B, 200C; for nonmajors: course 100. Methodological considerations, approaches, and limitations in epidemiological studies of occupational groups and environments. S/U or letter grading.

265. Epidemiologic Methods in Occupational and Environmental Health (2)
Lecture, two hours. Introduction to epidemiologic methods applied to evaluation of human health consequences of occupational and environmental hazards, including study design, exposure assessment, and statistical techniques commonly encountered in research focused on assessing adverse health effects resulting from occupational and environmental exposures. Topics include clusters, meta-analysis, risk assessment, and policy development. Illustrated by case studies, with focus on techniques to critically evaluate and interpret current literature. Letter grading.
266. Global Health and Tropical Medicine (4)
Lecture, four hours. Introduction to tropical diseases and global health. How humanitarian health issues, maternal-child health, research in tropics, World Health Organizations, and political/medical constraints all are related with respect to health on worldwide scale. Letter grading.

267. Methodologic Issues in Reproductive Epidemiology (2)
Seminar, two hours. General discussion of methodologic issues important to epidemiologic studies of reproductive outcomes, including fertility, low birth weight, prematurity, birth defects, pregnancy loss, and perinatal mortality. Approaches to study design and exposure assessment and identification of potential sources of bias illustrated through review of recent studies published in literature and with particular focus on occupational and environmental exposures and birth cohorts. S/U or letter grading.

268. Introduction to Pharmacoepidemiology (2)
Lecture, two hours. Requisites: courses 200A, 200B, 200C. Pharmacoepidemiology is application of epidemiologic knowledge, reasoning, and methods to study of effects and uses of drugs. Survey of contemporary roles of pharmacoepidemiology in drug development and public health, with historical background of its evolution and projections of future prospects. S/U or letter grading.

270. Behavioral Epidemiology (4)
Lecture, four hours. Requisite: course 100 or 200A. Introduction to range of different methodologies used to collect data and conduct analyses on behaviors studied in epidemiology research. How to collect, analyze, and interpret data on behaviors that can be associated with disease outcomes, including methods to collect survey data (i.e., design of questionnaires, interviewing techniques, use of technology to collect data) and methods to collect and analyze qualitative data (e.g., ethnographic interviews, focus groups, systematic observations). Overview information on epidemiology of key behavioral factors affecting human health, including sexual risk behaviors, substance use, physical activity, and healthcare utilization. S/U or letter grading.

M273. Responsible Conduct of Research in Global Health (2)
(Formerly numbered 273.) (Same as Public Health M273.) Lecture, two hours. Requisite: Community Health Sciences 200. Introduction to fundamental principles of public health ethics, current ethical procedures, guidelines, and requirements, and ethical issues facing public health professionals working in developing countries. History of public health issues, unique ethical issues of research in developing countries, analysis of ethical implications of informed consent, responsibility to study community, mechanisms of study approval, role of funders, and role and responsibilities of review boards. S/U or letter grading.

C275. Terrorism, Counterterrorism, and Weapons of Mass Destruction: Practical Approach (5)
Seminar, three hours. Terrorism, its origins, and ways of addressing terrorism at local, national, and global levels. Guest speakers from variety of UCLA departments and from Los Angeles. Concurrently scheduled with course CM175. S/U or letter grading.

291. Seminar: Special Topics in Epidemiology (2)
Seminar, two hours. Requisites: courses 200A, 200B, and 200C (or 100). Review of current epidemiologic research contained in recent medical literature. May be repeated for credit. S/U or letter grading.

292. Advanced Seminar: Epidemiology (2)

293. International HIV/AIDS Seminar (2)
Seminar, two hours. Ongoing discussion of worldwide pandemic of HIV/AIDS, with emphasis on problems of surveillance, reporting, and intervention. Discussion of recent literature. Presentations by fellows from other countries. S/U grading.

295. Seminar: Epidemiology -- Cancer (2)
Seminar, two hours. Requisites: courses 200A, 200B, and 200C (or 100). Introduction of basic concepts of cancer epidemiology and review of current epidemiological research in cancer in recent medical and epidemiological literature. May be repeated for credit. S/U or letter grading.
400. Field Studies in Epidemiology (4)
Fieldwork, to be arranged. Field observation and studies in selected community organizations for health promotion or medical care. Students must file field placement and program training documentation on form available from Student Affairs Office. May not be applied toward MS minimum course requirement; 4 units may be applied toward 44-unit minimum total required for MPH degree. Letter grading.

M403. Computer Management and Analysis of Health Data Using SAS (4)
(Same as Biostatistics M403B.) Lecture, two hours; laboratory, two hours. Requisites: Biostatistics 100A, 100B (100B may be taken concurrently). Introduction to practical issues in management and analysis of health data using SAS programming language. Cross-sectional and longitudinal population-based data sets to be used throughout to illustrate principles of data management and analysis for addressing biomedical and health-related hypotheses. Letter grading.

404. Advanced SAS Techniques for Management and Analysis of Epidemiologic Data (2)
Lecture, three hours. Requisite: course M403 or 410. Hands-on experience with SAS 9.2/9.3, with focus on using SAS data and PROC steps efficiently to manage, clean, analyze, and tabulate epidemiologic data from data collection systems. Common issues and solutions in data management, including lack of documentation, data definitions, unique subject identifiers, and nonstandard data formats. S/U or letter grading.

410. Management of Epidemiologic Data (2)
Lecture, two hours. Data management for various epidemiologic study designs, confidentiality concerns; data management systems; introduction to mainframe computer. S/U or letter grading.

412. Public Health Surveillance (2)
Lecture, two hours. Requisites: courses 200A, 200B, and 200C (or 100), Biostatistics 100A. Overview of public health surveillance methodology, including (1) design, implementation, and evaluation of surveillance systems, (2) analysis and interpretation of surveillance data, and (3) application of surveillance methods to specific health-related outcomes. Letter grading.

413. Methods of Scientific Communication (2)
Lecture, two hours. Requisites: courses 200A, 200B, and 200C (or 100). Principles of scientific writing and communication. Approaches to developing effective written, oral, and visual presentations of epidemiologic research findings. Communication issues arising in conduct of research, including informed consent process. S/U or letter grading.

M418. Rapid Epidemiologic Surveys in Developing Countries (4)
(Same as Community Health Sciences M418.) Lecture, four hours. Requisites: courses 200A, 200B, and 200C (and/or 100), Biostatistics 100A. Presentation of how to do health surveys in Third World countries. Practical assistance for planning and organizing surveys, including use of microcomputers to develop and test questionnaire, select sample, process and analyze data, and prepare final report. Letter grading.

420. Field Trials in Developing Countries (4)
Lecture, four hours. Requisite: course 100 or 200A or 200B. Introduction to practical concepts and issues in conducting epidemiologic field research in developing countries, including formulating research questions, study site selection, ethical considerations, and logistics of data and specimen collection. S/U or letter grading.

501. Cooperative Program (2 to 8)
Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. No more than 8 units may be applied toward master's degree minimum total course requirement; may not be applied toward minimum graduate course requirement. S/U grading.
596. Directed Individual Study or Research (2 to 8)
Tutorial, to be arranged. Limited to graduate students. Individual guided studies under direct faculty supervision. Only 4 units may be applied toward MPH and MS minimum total course requirement. May be repeated for credit. S/U or letter grading.

597. Preparation for Master's Comprehensive or Doctoral Qualifying Examinations (2 to 12)
Tutorial, to be arranged. Limited to graduate students. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

598. Master's Thesis Research (2 to 8)
Tutorial, to be arranged. Only 4 units may be applied toward MPH and MS minimum total course requirement; may not be applied toward minimum graduate course requirement. May be repeated for credit. S/U grading.

599. Doctoral Dissertation Research (2 to 12)
Tutorial, to be arranged. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.