

**UCLA Jonathan and Karin Fielding
School of Public Health**

Department of Epidemiology

**Graduate Student Handbook
2019-2020**

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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 Programs

The Department of Epidemiology offers the following degree programs:

1. Master of Science in Epidemiology (MS)
2. Master of Public Health (MPH)
3. Doctor of Philosophy in Epidemiology (PhD)

Degree Program Requirements

Master of Science Degree (MS)

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.

Mandatory core courses (36 units) are Epidemiology 200A (four units), 200B (six units), 200C (six units), 220 (four units); Biostatistics 100A (four units) or 200A (4 units), 100B (four units) or 200B (4 units); two units of an approved chronic disease epidemiology course, one additional statistics course (four units) in regression or multivariate methods that is approved by the department; and two units of an approved data-management course. MS students who do not have a degree from a Council on Education for Public Health (CEPH)-accredited public health school, must take PH 150 to meet the CEPH required 12 learning objectives. Students are to consult their academic advisers for recommendations on course selection.

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 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. 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.

MS students with US clinical doctorates or currently enrolled in a US medical school may substitute the Epidemiology 220 and Chronic Disease Epidemiology course requirements with an alternate graduate course. The alternate course must be taken for a letter grade for the same units and must be with the approval of the academic adviser. Students should consult their adviser and the Academic Affairs Officer to confirm course selection.

IMPORTANT REMINDER: 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. Additionally, the Department adheres to the Graduate Division's position on retroactive changes and will only consider such requests under extenuating circumstances.

Minimum Units Required: 56

All courses must be taken for a letter grade.

Department Requirements:

Dept/Course #	Course Title/Description	Required Units
Biostatistics 100A	<i>Introduction to Biostatistics</i>	4
Biostatistics 100B	<i>Introduction to Biostatistics</i>	4
Epidemiology 200A	<i>Epidemiology Methods I</i>	6
Epidemiology 200B	<i>Epidemiologic Methods II</i>	6
Epidemiology 200C	<i>Epidemiologic Methods III</i>	6
Epidemiology 220	<i>Principles of Infectious Disease Epidemiology</i>	4
One Course on Chronic Disease Epidemiology		2
One Course on Data Management and Analysis		2
One Course on Regression or Multivariate Methods		4
Public Health 150 (if required)	<i>Contemporary Health Issues</i>	4

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, 404,407A,407B
- Environmental Epidemiology: Epidem 260
- Genetic Epidemiology: Epidem 249
- Global Epidemiology: Epidem 273, 420
- Infectious Disease: Epidem 227, 228, 230, 231, 232
- Lifecourse Epidemiology: Epidem 247
- Methods, Quantitative: Epidem M204, M211, 212, 215
- Methods, Other: Epidem M216, M218, 413
- Nutritional Epidemiology: Epidem M254
- Occupational Epidemiology: Epidem M261, 265
- Reproductive Epidemiology: Epidem 267
- Social and Behavioral Epidemiology: Epidem 217,246, 268, 270, M272, 412

The following course can fulfill the chronic disease course requirements:

- Cancer Epidemiology: Epidem 242, 243, 244, 245
- Cardiovascular Epidemiology: Epidem 240
- Environmental Epidemiology: Epidem 260
- Genetic Epidemiology: Epidem 249
- Lifecourse Epidemiology: Epidem 247
- Nutritional Epidemiology: Epidem M254
- Occupational Epidemiology: Epidem M261, 265
- Reproductive Epidemiology: Epidem 267

Thesis or Capstone Plan

Epidemiology students may follow either the thesis plan (Plan I) or the capstone plan (Plan II). A thesis or capstone plan must be completed before graduation.

Thesis Plan:

If the Thesis Plan is chosen, a thesis committee of at least three UCLA faculty members 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. Master's Thesis committee members must hold one of the following academic ranks: Professor (any rank, regular series); Professor Emeritus; Professor-in-Residence (any rank); Acting Professor (any rank). The Chair of the committee and at least one other member must hold academic appointments in the student's department or interdepartmental program at UCLA. 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 UCLA 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.

Advancing to Candidacy

Advancing to candidacy is a requirement for all MS degree candidates. Petitions to advance to candidacy are distributed at the annual graduation workshop. Petitions are also available in the Central Student Affairs Office (room A1-269). Forms are to be completed by the student as instructed and signed by the academic adviser, and then returned to the Department Student Affairs Officer.

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.

SUGGESTED COURSE PLAN MS - 56 UNITS

Year 1					
Fall (Q1)	Units	Winter (Q2)	Units	Spring (Q3)	Units
Epidemiology 200A	4	Epidemiology 200B	6	Epidemiology 200C	6
Biostatistics 100A*	4	Biostatistics 100B	4	Course	4
Public Health 150** or Course	4				
QUARTER UNITS	12	QUARTER UNITS	10	QUARTER UNITS	10

Year 2					
Fall (Q4)	Units	Winter (Q5)	Units	Spring (Q6)	Units
Course	4	Epidemiology 220	4		
Course	4	Course	4		
Course	4	Course	4		
QUARTER UNITS	12	QUARTER UNITS	12	QUARTER UNITS	

MS Capstone/Thesis***

MS Capstone/Thesis***

MS Capstone/Thesis***

* Students can waive the BS 100A course requirement by exam, however units are not credited. Students will take an approved 200-level or 400-level course for a letter grade to make up the units.

** If required; academic degree students who do not have a degree from a CEPH-accredited public health school must take PH150

*** MS Capstone/Thesis requirement is fulfilled in Q4, Q5, or Q6 after completion of Epi 200C

MS Competencies for Epidemiology Majors

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

Competency	Source of Training and Evaluation
1. Understand how to assess, critique, and interpret epidemiological studies, including their strengths and weaknesses	Epi 200A, 200B, 200C, Thesis/Report
2. Describe a public health problem in terms of magnitude, population, time and place	Epi 200A, 200B, 200C, Thesis/Report
3. Identify key sources of data for epidemiologic purposes	Epi 200A; 200B; Epi 403, Epi 404, or Epi 410
4. Identify the principles and limitations of public health screening programs	Epi 220*
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	Epi 200A, 200B, 200C, Epi 220, Chronic Disease Epidemiology course, Thesis/Report
6. Calculate basic epidemiology measures	Epi 200A, 200B, 200C, Multi-Regression Statistics course, Thesis
7. Draw appropriate inferences from epidemiologic data	Epi 200A, 200B, 200C, Multi-Regression Statistics course, Thesis/Report
8. Effectively communicate orally and in writing epidemiologic information to lay and professional audiences	Epi 403, Epi 404, or Epi 410; Thesis/Report
9. Observe ethical guidelines in the collection, maintenance, use and dissemination of epidemiologic data	Epi 403, Epi 404, or Epi 410; Thesis/Report
10. Identify, explain and apply epidemiologic principles and methods in a research, public health, or community setting	Epi 200A, 200B, 200C, Epi 220, Chronic Disease Epidemiology course, Thesis/Report
11. Comprehensively design and implement an epidemiologic research study of publishable quality	Epi 200A, 200B, 200C, Thesis/Report

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 Public Health 200AB: *Foundations in Public Health*, a 16-unit comprehensive integrated core course taken by all MPH students in the first (fall) and second (winter) quarter.

Students in the MPH program in Epidemiology take Biostatistics 100B in their second quarter, Epidemiology 410 in their third quarter, Epidemiology 200A in their fourth quarter (fall of year 2), and Epidemiology 200B, Epidemiology 220, and Epidemiology 413 in their fifth quarter.

All MPH students must submit a report demonstrating competence in epidemiologic methods. The report may not be submitted prior to the completion of Epidemiology 400: *Field Studies in Epidemiology*. Epidemiology 400 must be taken after completion of Epidemiology 410.

Remember to satisfy the School requirement of taking at least 8 units at the 400-level. MPH students may apply *Epidemiology 400: Field Study in Epidemiology* (4 units) towards the 8 units of 400-level coursework.

IMPORTANT REMINDER: 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. Additionally, the Department adheres to the Graduate Division's position on retroactive changes and will only consider such requests under extenuating circumstances.

MPH Comprehensive Exam

The MPH Comprehensive Exam is offered twice a year. Notices are posted asking qualified students to sign up. The MPH Comprehensive Exam may only be repeated once.

The MPH Comprehensive Exam is administered by the Department's MPH Comprehensive Exam Committee. Students must successfully complete the Public Health 200AB series and Epidemiology 200A to be eligible to take the MPH Comprehensive Exam. Students may be currently enrolled in Epidemiology 200B when taking the MPH Comprehensive Exam.

There is no makeup exam offered. In the quarter that a student plans to take the MPH Comprehensive Exam, students may discuss any scheduling concerns with the Academic Affairs Officer up to 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.

Advancing to Candidacy

Advancing to candidacy is a requirement for all MPH degree candidates. Petitions to advance to candidacy are distributed at the annual graduation workshop. Petitions are also available in the Central Student Affairs Office (room A1-269). Forms are to be completed by the student as instructed and signed by the academic adviser, and then returned to the Department Student Affairs Officer.

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.

SUGGESTED COURSE PLAN MPH - 68 UNITS

Year 1					
Fall (Q1)	Units	Winter (Q2)	Units	Spring (Q3)	Units
Public Health 200A Course	8	Public Health 200B Biostatistics 100B	8	Epidemiology 410 Course Course	4
	4		4		4
					4
QUARTER UNITS	12	QUARTER UNITS	12	QUARTER UNITS	12

Summer Intersession
Practicum/ Internship

Year 2					
Fall (Q4)	Units	Winter (Q5)	Units	Spring (Q6)	Units
Epidemiology 200A Epidemiology 400 Course	4	Epidemiology 200B Epidemiology 220 Epidemiology 413	6	Course Course	4
	4		4		4
	4		2		
QUARTER UNITS	12	QUARTER UNITS	12	QUARTER UNITS	8

MPH Comprehensive Exam**

MPH Comprehensive Exam**

** MPH68 will take MPH Comprehensive Exam in Q5 or Q6

SUGGESTED COURSE PLAN MPH - 56 UNITS

Year 1					
Fall (Q1)	Units	Winter (Q2)	Units	Spring (Q3)	Units
Public Health 200A Epidemiology 200A Course	8	Public Health 200B Epidemiology 200B Biostatistics 100B Epidemiology 413	8	Epidemiology 400 Epidemiology 410 Course Course Course	4
	4		6		4
	4		4		4
			2		4
					4
QUARTER UNITS	16	QUARTER UNITS	20	QUARTER UNITS	20

MPH Comprehensive Exam

Master of Public Health – Specialization in Epidemiology

Minimum Units Required: **68**

At least 8 units must be in the 400 series. Eight (8) units can be taken outside of the Epidemiology department with the consent of the adviser. **All courses must be taken for a letter grade.**

School Requirements:

Dept/Course #	Course Title/Description	Required Units
Public Health 200A	<i>Foundations in Public Health</i>	8
Public Health 200B	<i>Foundations in Public Health</i>	8

Department Requirements:

Dept/Course #	Course Title/Description	Required Units
Biostatistics 100B	<i>Introduction to Biostatistics</i>	4
Epidemiology 200A	<i>Epidemiologic Methods I</i>	6
Epidemiology 200B	<i>Epidemiologic Methods II</i>	6
Epidemiology 410	<i>Management of Epidemiologic Data</i>	4*
Epidemiology 220	<i>Principles in Infectious Disease Epidemiology</i>	4
Epidemiology 400	<i>Field Studies in Epidemiology</i>	4
Epidemiology 413	<i>Methods of Scientific Communication</i>	2
One Course on Chronic Disease Epidemiology		2
One Course on Data Management and Analysis		2

*Epidemiology 410 is proposed to increase to 4 units effective spring 2020

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, 404,407A,407B
- Environmental Epidemiology: Epidem 260
- Genetic Epidemiology: Epidem 249
- Global Epidemiology: Epidem 273, 420
- Infectious Disease: Epidem 227, 228, 230, 231, 232
- Lifecourse Epidemiology: Epidem 247
- Methods, Quantitative: Epidem M204, M211, 212, 215
- Methods, Other: Epidem M216, M218, 413
- Nutritional Epidemiology: Epidem M254
- Occupational Epidemiology: Epidem M261, 265
- Reproductive Epidemiology: Epidem 267
- Social and Behavioral Epidemiology: Epidem 217,246, 268, 270, M272, 412

The following course can fulfill the chronic disease course requirements:

- Cancer Epidemiology: Epidem 242, 243, 244, 245
- Cardiovascular Epidemiology: Epidem 240
- Environmental Epidemiology: Epidem 260
- Genetic Epidemiology: Epidem 249
- Lifecourse Epidemiology: Epidem 247
- Nutritional Epidemiology: Epidem M254
- Occupational Epidemiology: Epidem M261, 265
- Reproductive Epidemiology: Epidem 267

Master of Public Health – Specialization in Epidemiology

Students with a US Clinical Doctorate or Currently Enrolled in a US Medical School

Minimum Units Required: **56**

At least 8 units must be in the 400 series. Eight (8) units can be taken outside of the Epidemiology department with the consent of the adviser. **All courses must be taken for a letter grade.**

School Requirements:

Dept/Course #	Course Title/Description	Required Units
Public Health 200A	<i>Foundations in Public Health</i>	8
Public Health 200B	<i>Foundations in Public Health</i>	8

Department Requirements:

Dept/Course #	Course Title/Description	Required Units
Biostatistics 100B	<i>Introduction to Biostatistics</i>	4
Epidemiology 200A	<i>Epidemiologic Methods I</i>	6
Epidemiology 200B	<i>Epidemiologic Methods II</i>	6
Epidemiology 410	<i>Management of Epidemiologic Data</i>	4*
Epidemiology 400	<i>Field Studies in Epidemiology</i>	4
Epidemiology 413	<i>Methods of Scientific Communication</i>	2

**Epidemiology 410 is proposed to increase to 4 units effective spring 2020*

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, 407A, 407B
- Environmental Epidemiology: Epidem 260
- Genetic Epidemiology: Epidem 249
- Global Epidemiology: Epidem 273, 420
- Infectious Disease: Epidem 227, 228, 230, 231, 232
- Lifecourse Epidemiology: Epidem 247
- Methods, Quantitative: Epidem M204, M211, 212, 215
- Methods, Other: Epidem M216, M218, 413
- Nutritional Epidemiology: Epidem M254
- Occupational Epidemiology: Epidem M261, 265
- Reproductive Epidemiology: Epidem 267
- Social and Behavioral Epidemiology: Epidem 217, 246, 268, 270, M272, 412

MPH Report 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.

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:

Competency	Source of Training and Evaluation
1. Understand how to assess, critique, and interpret epidemiological studies, including their strengths and weaknesses	PH 200AB, Epi 200A, 200B, Epi410*
2. Describe a public health problem in terms of magnitude, population, time and place.	PH 200AB, Epi 200A, 200B, Epi410*
3. Identify key sources of data for epidemiologic purposes	PH 200AB, Epi 200A; 200B; Epi 410, Epi 403, or Epi 404
4. Identify the principles and limitations of public health screening programs	PH 200AB, Epi 220*
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	PH 200AB, Epi 200A, 200B, Epi 410, Epi 220, Chronic Disease Epidemiology course*
6. Calculate basic epidemiology measures	PH 200AB, Epi 200A, 200B, Epi 410*
7. Draw appropriate inferences from epidemiologic data	PH 200AB, Epi 200A, 200B, Epi 410*
8. Effectively communicate orally and in writing epidemiologic information to lay and professional audiences	PH 200AB, Epi 403, Epi 404, or Epi 410; Epi 413; Epi 400 Field Studies*
9. Observe ethical guidelines in the collection, maintenance, use and dissemination of epidemiologic data	PH 200AB, Epi 403, Epi 404, or Epi 410; Epi 413*
10. Identify, explain and apply epidemiologic principles and methods in a research, public health, or community setting	PH 200AB, Epi 200A, 200B, Epi 410, Epi 220, Chronic Disease Epidemiology course, Epi 400 Field Studies*

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. Students in the Epidemiology-PhD program have a mastery of epidemiology theories and methods demonstrated by formal graduate training or applied experience.

Candidates may join the PhD program either through direct admission or by transferring from one of the Department's masters programs.

Transferring to the PhD Program

The Department of Epidemiology considers requests to transfer to the doctoral program in the winter and spring terms for admission to the fall and spring terms, respectively. Petition deadlines are announced during the course of the school year. In addition to the University minimum requirements, candidates eligible to transfer to the PhD program have:

- an outstanding performance on the Graduate Record Examination (GRE);
- at least a 3.0 undergraduate grade-point average;
- at least a 3.5 graduate grade-point average with a combined GPA of no less than 3.56 in Epidem 200A, 200B, and 200C with at least an A- in two courses and no less than a B+ in any course in the series;
- the commitment of a prospective doctoral advisor

Transferring to the PhD program is not guaranteed and is subject to the approval of the Graduate Division at the recommendation of the Epidemiology faculty and with the approval of the Department Chair and Fielding School. To request a transfer to the PhD program:

- identify and secure an eligible faculty member to serve as the doctoral adviser,
- complete a Blue Petition noting the request to transfer to PhD, the proposed adviser, and the effective term
- submit a transfer request comprised of:
 - the blue petition signed by proposed doctoral adviser
 - a current CV
 - 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 of Purpose) must be submitted to the Department Academic Affairs Officer in room 71-254A CHS. Please do not submit transfer requests directly to the Central Student Affairs Office.

Advising

Advisers are matched with doctoral students during the direct-admission or transfer 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 applied to degree requirements must be approved by the doctoral adviser.

Additionally, PhD students work closely with both a Guidance Committee and their Doctoral Committee. The Guidance Committee is an internal network of mentorship defined in the early stages of study and established when submitting Doctoral Form 1. There are no restrictions to the Guidance Committee, but it should ideally contain members who can provide helpful perspective on the expectations of independent research.

The Doctoral Committee is established through a nomination approved by the Graduate Division. Students

may nominate doctoral committees after passing the Written Qualifying Exam and submitting both Doctoral Forms 2 and 3.

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 10 business days for committee approval).

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.

All courses must be taken for a letter grade.

Minimum Units Required: 56

BIOSTATS 100A waiver exam: Students meeting eligibility requirements may waive out of Biostatistics 100A by passing the waiver exam. Students who waive out must make up the units with a graduate-level elective course taken for a letter grade.

Department Requirements:

Dept/Course #	Course Title/Description	Required Units
BIOSTAT 100A	<i>Introduction to Biostatistics</i>	4
BIOSTAT 100B	<i>Introduction to Biostatistics</i>	4
EPIDEM 200A	<i>Epidemiology Methods I</i>	6
EPIDEM 200B	<i>Epidemiologic Methods II</i>	6
EPIDEM 200C	<i>Epidemiologic Methods III</i>	6
EPIDEM 220	<i>Principles of Infectious Disease Epidemiology</i>	4
One Course in Chronic Disease Epidemiology		2
One Course in Data Management and Analysis		2
One Course in Regression or Multivariate Methods		4
Public Health 150 (if required)	<i>Contemporary Health Issues</i>	4

Remaining units are fulfilled 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, 404,407A,407B
- Environmental Epidemiology: Epidem 260
- Genetic Epidemiology: Epidem 249
- Global Epidemiology: Epidem 273, 420

- Infectious Disease: Epidem 227, 228, 230, 231, 232
- Lifecourse Epidemiology: Epidem 247
- Methods, Quantitative: Epidem M204, M211, 212, 215
- Methods, Other: Epidem M216, M218, 413
- Nutritional Epidemiology: Epidem M254
- Occupational Epidemiology: Epidem M261, 265
- Reproductive Epidemiology: Epidem 267
- Social and Behavioral Epidemiology: Epidem 217,246, 268, 270, M272, 412

The following course can fulfill the chronic disease course requirements:

- Cancer Epidemiology: Epidem 242, 243, 244, 245
- Cardiovascular Epidemiology: Epidem 240
- Environmental Epidemiology: Epidem 260
- Genetic Epidemiology: Epidem 249
- Lifecourse Epidemiology: Epidem 247
- Nutritional Epidemiology: Epidem M254
- Occupational Epidemiology: Epidem M261, 265
- Reproductive Epidemiology: Epidem 267

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 an Advanced Doctoral Seminar (2 units) of which Epidem 292 must be taken at least twice. The statistics and pathobiology courses must be approved by the doctoral adviser before enrollment begins.

IMPORTANT REMINDER: 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. Additionally, the Department adheres to the Graduate Division’s position on retroactive changes and will only consider such requests under extenuating circumstances.

All courses excluding the Advanced Doctoral Seminar and the pathobiology course must be taken for a letter grade. The Advanced Doctoral Seminar 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.

Dept/Course #	Course Title/Description	Required Units
EPIDEM M204	<i>Logic, Causation, and Probability</i>	4
Advanced Doctoral Seminar		2
Advanced Doctoral Seminar		2
Advanced Doctoral Seminar		2
One Course in Pathobiology		4
One Course in Statistics		4

Advanced Doctoral Seminar

All doctoral students must enroll in an Advanced Doctoral Seminar in three quarters of their tenure, for which Epidem 292 must be taken at least twice. Either Epidemiology 293 or Epidemiology 295 may be applied once to fulfill the Advanced Doctoral Seminar Requirement. Students must enroll in a doctoral seminar at least once before 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.

SUGGESTED COURSE PLAN PhD - YEARS 1 AND 2

Year 1					
Fall (Q1)	Units	Winter (Q2)	Units	Spring (Q3)	Units
Epidemiology 200A	4	Epidemiology 200B	6	Epidemiology 200C	6
Biostatistics 100A*	4	Biostatistics 100B	4	Course	4
Public Health 150** or Course	4	Epidemiology 220	4	Course	2
QUARTER UNITS	12	QUARTER UNITS	14	QUARTER UNITS	12
Year 2					
Fall (Q4)	Units	Winter (Q5)	Units	Spring (Q6)	Units
Epidemiology M204	4	Course	4	Doctoral Seminar	2
Course	4	Course	4	Course	4
Course	4	Course	4	Course	4
				Ind. Directed Study (IDS)	2
QUARTER UNITS	12	QUARTER UNITS	12	QUARTER UNITS	12

Written Doctoral Exam

Year 3					
Fall (Q4)	Units	Winter (Q5)	Units	Spring (Q6)	Units
Doctoral Seminar	2	Ind. Directed Study (IDS)	12	Ind. Directed Study (IDS)	12
Course	4				
Course or IDS	4				
Ind. Directed Study (IDS)	2				
QUARTER UNITS	12	QUARTER UNITS	12	QUARTER UNITS	12

Oral Qualifying Exam

Year 4					
Fall (Q4)	Units	Winter (Q5)	Units	Spring (Q6)	Units
Doctoral Seminar	2	Ind. Directed Study (IDS)	12	Ind. Directed Study (IDS)	12
Ind. Directed Study (IDS)	10				
QUARTER UNITS	12	QUARTER UNITS	12	QUARTER UNITS	12

Final Defense
Dissertation Filing

* Students can waive the BS 100A course requirement by exam, however units are not credited. Students will take an approved 200-level or 400-level course for a letter grade to make up the units.

** If required; academic degree students who do not have a degree from a CEPH-accredited public health school must take PH 150

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.

- The MS Equivalency Form and Doctoral Form 1 must be submitted to be eligible to take the Written Doctoral Qualifying Examination.
- Doctoral Form 2 and Doctoral Form 3 must be submitted to be eligible to nominate the doctoral committee.

Advancement to Candidacy

After completing the course requirements, and passing both the Written Doctoral Examination and the Oral Qualifying Examination, the student is advanced to candidacy to complete work on a dissertation in the principal field of study. Effective the term immediately following doctoral advancement-to-candidacy, Nonresident Supplemental Tuition is waived for nine terms for students with this assessment.

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/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 by the middle of the fourth year in residence (11 quarters); and complete the dissertation and defense by the end of the sixth year (18 quarters). Students must advance to candidacy by their 12th quarter to be eligible for department support. After doctoral advancement, students are again eligible for department support for up to nine quarters.

Minimum Standards for Doctoral Committees in Epidemiology

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 academic appointment in Epidemiology.
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. Under rare circumstances, the department or inter-departmental program Chair may petition the Graduate Division for an exception to allow a second member (not the Chair or Co-Chairs) to participate remotely in a doctoral oral qualifying examination or a final oral examination (defense of the dissertation).

PhD Competencies for Epidemiology Majors

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

Competency	Source of Training and Evaluation
12. Locate, identify, critically evaluate, and synthesize current epidemiologic literature and identify avenues for new research and/or theoretical development	Epi 200A, 200B, 200C, Epi M204, Epi 292, Proposal/Thesis*
13. Describe a public health problem in terms of magnitude, population, time and place	Epi 200A, 200B, 200C, Epi 220, Chronic disease required elective course; Proposal/Thesis*
14. Identify key sources of data for epidemiologic purposes	Epi 200A; Epi 200B; Epi 403, Epi 404, or Epi 410; Epi 292, Proposal/Thesis
15. Identify the principles and limitations of public health screening programs	Epi 220*
16. Explain the principles of pathological processes that underlie human morbidity and mortality	Required pathobiology course, Epi 220, Chronic disease required elective course*
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.	Epi 200A, 200B, 200C, Epi M204, Epi 220, Chronic disease required elective course, Epi 292, Proposal/Thesis*
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	Required methods courses: Epi 200A 200B, 200C, Epi M204; Required statistics courses: Multivariate Statistics + 1 additional course; Proposal/Thesis*
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	Required methods courses: Epi 200A 200B, 200C, Epi M204; Required statistics courses: Multivariate Statistics + 1 additional course; Proposal/Thesis
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	Epi 403, Epi 404 or Epi 410; Epi 292, Proposal/Thesis
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	Epi 292, Proposal/Thesis

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 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 of 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

Teaching Experience

While teaching is strongly encouraged, the experience is not required for any degree. The Department of Epidemiology offers several teaching opportunities each year in introductory and elective courses as well as advanced courses in epidemiology theory and methods. Students typically become eligible for teaching in the Department after mastering the Core Curriculum (Epidemiology 200ABC series) in the first year. Students may apply for these positions in spring for the coming year.

Epidemiology students are also competitive for teaching opportunities campus-wide with a wealth of opportunity among undergraduate courses in areas such as life sciences, public health, statistics, and international studies. Students may be eligible for these positions as early as their first term. Students should contact hiring departments for more information.

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 jdmliller@ph.ucla.edu.

Internship and Career Services

Epidemiology MPH students may contact Dr. Shira Shafir, Field Studies Director for Epidemiology sshafir@ucla.edu who facilitates placement of MPH students in academic and non-academic internships. Some of the services provided include assistance with matching to an internship, individual advising (i.e. how to choose the best internship based on long term career goals), resume and cover letter review, and mock interviews.

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.

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 approval 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.

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.

Meeting Deadlines

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/>.

Most student actions require approvals by both the Department and Fielding School. For this reason, FSPH students may have a deadline earlier than what is posted by the Graduate Division. Please consult the Department SAO or Central Student Affairs to confirm key dates.

Epidemiology Courses

100. Principles of Epidemiology

Units: 4

Lecture, four hours; discussion, two hours. Preparation: one full biological sciences course. Not open for credit to students with credit for course 200A, 200B, or 200C. Introduction to epidemiology, including factors governing health and disease in populations. Letter grading.

200A. Methods I: Basic Concepts and Study Designs

Units: 6

Lecture, six hours; discussion, four hours. Enforced requisite or co-requisite: Biostatistics 100A or Public Health 200A/B. Introduction to basic concepts, principles, and methods of chronic and infectious disease epidemiology. Letter grading.

200B. Methods II: Prediction and Validity

Units: 6

Lecture, six hours; discussion, four hours. Enforced requisites: course 200A, Biostatistics 100A or Public Health 200A/B, 100B. Introduction to basic concepts, principles, and methods of chronic and infectious disease epidemiology. Letter grading.

200C. Methods III: Analysis

Units: 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

Units: 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

Units: 4

(Same as Statistics M243.) Lecture, four hours. Preparation: two terms of statistics or probability and statistics. Recommended requisite: course 200C. Principles of deductive logic and causal logic using counterfactuals. Principles of probability logic and probabilistic induction. Causal probability logic using directed acyclic graphs. S/U or letter grading.

M211. Statistical Methods for Epidemiology

Units: 4

(Same as Statistics M250.) Lecture, four hours. Preparation: two terms of statistics (such as Biostatistics 100A or Public Health 200A/B, Biostatistics 100B). Enforced 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.

212. Statistical Modeling in Epidemiology

Units: 4

(Formerly numbered M212.) 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.

215. Systematic Review and Meta-Analysis

Units: 2

Lecture, two hours. Requisites: courses 200A, 200B, (Biostatistics 100A or Public Health 200A/B),. Offers theoretical and practical understanding of systematic reviews and meta-analysis of clinical trials and observational studies. Students learn how to conduct systematic literature search, assess quality of

selected studies, identify sources of heterogeneity, conduct meta-analysis, and understand standards of reporting on meta-analyses. Offers practical training in meta-analyses and meta-regression using STATA software. Letter grading.

M216. Applied Sampling

Units: 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.

217. Social Networks and Public Health

Units: 4

Lecture, four hours. Requisite: course 100 or 200A, or Public Health 200A/B. Principles of social network research, social network analysis, and social network intervention, especially in relation to public health and health behavior. Coding examples are provided in R (mainly R igraph and ggplot2 packages). Discussion of landmark social network papers relevant to public health. S/U or letter grading.

M218. Questionnaire Design and Administration

Units: 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

Units: 4

Lecture, three hours. Requisite: course 100 or 200A, or Public Health 200A/B. 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.

M226. Global Health Measures for Biological Emergencies

Units: 4

(Same as Ecology and Evolutionary Biology M226.) Lecture, four hours. Requisite: course 220. Mitigation of bioterrorism falls outside traditional public health programs and public health graduate education. Because of seriousness of such threats, it is important that individuals trained in public health understand problems and responses. Letter grading.

227. AIDS: Major Public Health Challenge

Units: 4

Lecture, four hours. Requisites: courses 100, or (200A, 200B, and 200C), or Public Health 200A/B, Biostatistics 100A or 110A (or Public Health 200A/B). 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

Units: 4

Lecture, three hours. Preparation: two biology courses. Requisites: course 100, Biostatistics 100A, or Public Health 200A/B. 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.

230. Epidemiology of Sexually Transmitted Diseases

Units: 4

Lecture, four hours. Requisites: courses 100, or (200A, 200B, and 200C) or Public Health 200A/B. 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

Units: 4

Lecture, three 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 Research of Marginalized and Hidden Populations

Units: 2

Lecture, two hours. Requisites: courses 100, or (200A, 200B, and 200C), or Public Health 200A/B. 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.

240. Cardiovascular Epidemiology

Units: 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

Units: 4

Lecture, four hours. Requisites: courses 100, or (200A, 200B, and 200C), or Public Health 200A/B. Introduction to basic concepts of cancer and molecular and genetic epidemiology. Review of current epidemiologic research in cancer in recent medical and epidemiological literature. Research proposal on cancer-related topic required. S/U or letter grading.

243. Molecular Epidemiology of Cancer

Units: 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

Units: 2

Lecture, two hours. Requisites: courses 100, or (200A, 200B, and 200C), or Public Health 200A/B, 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

Units: 2

Lecture, two hours. Enforced requisite: course 100, or 200A, or Public Health 200A/B. Recommended: courses 220, 242, 243. Introduction to best documented associations between infectious agents and human cancer. Topics include burden of disease, biology and natural history of infectious agents, carcinogenic mechanisms, environmental and genetic cofactors, prevention and methodological issues. S/U or letter grading.

246. Epidemiology of Aging

Units: 2

Lecture, two hours. Epidemiologic methods of estimating present and future burdens of aging: morbidity, disability, and dependency. Epidemiology of major disabling conditions affecting elderly. Evaluation of possible intervention strategies. Methodologic issues in geriatric epidemiology. S/U or letter grading.

247. Lifecourse Epidemiology

Units: 2

Lecture, two hours. Requisites: course 100 (or Public Health 200A), or 200A, Biostatistics 100A (or Public Health 200A/B), Biostatistics 100B, or equivalent, or consent of instructor. Introduction to concepts and methods for studying lifecourse determinants of health and disease. Consideration of how exposures at one stage of human lifespan influence health outcomes at multiple life stages. Analytical approaches to research on lifecourse determinants of health. S/U or letter grading.

249. Genetic Epidemiology I

Units: 4

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**Units: 4**

(Same as Environmental Health Sciences M211.) Lecture, four hours. Requisites: courses 100, (200A, 200B, and 200C), or Public Health 200A/B. 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**Units: 4**

(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**Units: 2 or 4**

Lecture, three hours. Requisites: courses 100, or (200A, 200B, and 200C), or Public Health 200A/B. 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**Units: 4**

(Same as Environmental Health Sciences M260.) Lecture, three hours. Requisites for majors: courses 100, or (200A, 200B, 200C), or Public Health 200A/B. 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**Units: 4**

Lecture, three 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**Units: 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**Units: 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**Units: 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

Units: 4

Lecture, four hours. Requisite: course 100, or 200A, or Public Health 200A/B. 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.

M272. Social Epidemiology

Units: 4

(Same as Community Health Sciences M272.) Lecture, two hours; discussion, one hour. Requisite: course 100, or Public Health 200A/B. Relationship between sociological, cultural, and psychosocial factors in etiology, occurrence, and distribution of morbidity and mortality. Emphasis on lifestyles and other socioenvironmental factors associated with general susceptibility to disease and subsequent mortality. Letter grading.

M273. Responsible Conduct of Research in Global Health

Units: 2

(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

Units: 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

Units: 2

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

292. Advanced Seminar: Epidemiology

Units: 2

Seminar, two hours. Requisites: courses 200A, 200B, 200C. Current research in epidemiology. May be repeated for credit. S/U grading.

293. International HIV/AIDS Seminar

Units: 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**Units: 2**

Seminar, two hours. Requisites: courses 200A, 200B, and 200C (or 100, or Public Health 200A/B). 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.

375. Teaching Apprentice Practicum**Units: 1 to 4**

Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400. Field Studies in Epidemiology**Units: 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 M.S. minimum course requirement; 4 units may be applied toward 44-unit minimum total required for M.P.H. degree. Letter grading.

M403. Computer Management and Analysis of Health Data Using SAS**Units: 4**

(Same as Biostatistics M403B.) Lecture, two hours; laboratory, two hours. Requisites: Biostatistics 100A or Public Health 200A/B. 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**Units: 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.

407A. Epidemiologic Research Using R**Units: 2**

Lecture, two hours; discussion, one hour. Requisites: courses 200A, 200B, 200C or consent of instructor. Designed to broadly offer R coding experience, with emphasis on data management, visualization, and analysis. Introduction of new concepts each week through guided interactive tutorials with working examples. S/U or letter grading.

407B. Applied Epidemiologic Research Using R**Units: 2**

Lecture, two hours. Requisite: course 407A. Designed to broadly offer R coding experience, with emphasis on data management, data description using tables and figures, and data analysis. Introduction of various concepts with data to facilitate interactive learning each week through guided R programming tutorials. Weekly R data analysis, in which students present their research and data analysis progress using real data. Each student performs secondary data analysis and prepares abstract, brief introduction, methods, and results part of submittable brief communication paper. S/U or letter grading.

410. Management of Epidemiologic Data**Units: 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**Units: 2**

Lecture, two hours. Requisites: courses 100, or (200A, 200B, and 200C), or Public Health 200A/B, 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. S/U or letter grading.

413. Methods of Scientific Communication**Units: 2**

Lecture, two hours. Requisite: course 100, or 200A, or Public Health 200A/B. 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.

420. Field Trials of Health Interventions in Low-Resource Settings**Units: 4**

Lecture, four hours. Requisite: course 100, or (200A and 200B), or Public Health 200A/B. 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.

495. Teacher Preparation in Epidemiology**Units: 2**

Seminar, two hours. Preparation: 18 units of cognate courses in area of specialization. May not be applied toward master's degree minimum total course requirement. May be repeated for credit. S/U grading.

501. Cooperative Program**Units: 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**Units: 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 M.P.H. and M.S. minimum total course requirement. May be repeated for credit. S/U or letter grading.

597. Preparation for Master's Comprehensive or Doctoral Qualifying Examinations**Units: 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**Units: 2 to 8**

Tutorial, to be arranged. Only 4 units may be applied toward M.P.H. and M.S. 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**Units: 2 to 12**

Tutorial, to be arranged. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

Public Health Course

150. Contemporary Health Issues

Units: 4

Lecture, four hours. Exploration of nation's health challenges, epidemiologic basis of public's health, organization and financing of health services in the U.S. and elsewhere, and current strategies for advancing people's health. Letter grading.

200A. Foundations in Public Health

Units: 8

Lecture, eight hours. Introduction to foundational concepts, definitions, historical milestones, and methods related to five core disciplines of public health. Using traditional lecture presentations, active-learning case-based classroom discussions, lab sessions, and community projects, students learn essential knowledge about public health as well as skills needed to be effective public health professional, including oral and written presentation skills for relevant audiences, data analytic and presentation skills, and multidisciplinary team-building skills working with students from throughout school of public health. Letter grading.

200B. Foundations in Public Health

Units: 8

Lecture, eight hours. Introduction to foundational concepts, definitions, historical milestones, and methods related to five core disciplines of public health. Using traditional lecture presentations, active-learning case-based classroom discussions, lab sessions, and community projects, students learn essential knowledge about public health as well as skills needed to be effective public health professional, including oral and written presentation skills for relevant audiences, data analytic and presentation skills, and multidisciplinary team-building skills working with students from throughout school of public health. Letter grading.