UCLA Fielding School of Public Health
Biostatistics

Entering Class 2024-2025
Student Handbook
MS, MPH & PHD

Contents

Introduction

Welcome to the UCLA Department of Biostatistics!

Biostatistics is the field encompassing the methodology and theory of statistics as applied to problems in the life and health sciences. Biostatisticians are trained in the development and application of statistical methods to address problems in public health and medicine. Biostatisticians collaborate with scientists in nearly every area related to health.

The Department of Biostatistics offers M.S., M.P.H., M.D.S.H.*, and Ph.D. degrees.

A degree in biostatistics prepares students for work in a wide variety of challenging positions in government, industry, and academics. UCLA graduates have found excellent careers in diverse settings including universities, the pharmaceutical industry, the biotechnology industry, health care settings, statistical consulting, and federal and local governments. Students have opportunities to participate with faculty in collaborative research projects in wide-ranging areas such as cancer, AIDS, gerontology, genetics, immunology, dentistry, medical imaging, mental health, health policy, and clinical research.

The field of biostatistics has undergone tremendous growth in recent years. Biostatistical input is now considered critical in addressing the world's health problems. UCLA has a superior record in training students both at the masters and doctoral levels. A UCLA biostatistics degree provides students with a balanced education that blends theory and practice.

* More information on the M.D.S.H. degree can be found on the official website here: https://mdsh.ucla.edu/

Damla Senturk, PhD
Biostatistics Professor and Chair
UCLA Fielding School of Public Health

Kate Crespi, PhD
Biostatistics Professor and Vice-Chair
UCLA Fielding School of Public Health

History and Mission

The UCLA Division of Biostatistics was established in 1959 in the then new School of Public Health. Among other degree programs, the division offered the Ph.D. in Biostatistics, with the first degree being awarded in 1963. The Department of Biostatistics was established in 1989 when the School of Public Health reorganized into five departments from a single school-wide departmental structure. The Department of Biostatistics was organized to carry out these goals:

- To develop a first-rate graduate program in biostatistics filling a demonstrated need for well-trained biostatisticians.

- To develop Biostatistical research programs responsive to the scientific problems encountered in public health and biomedicine.

- To actively collaborate with investigators at UCLA and worldwide in the solution of health problems.

The Department today is a leader in the training of biostatisticians for universities, government, and industry. The Department's research programs are highly respected nationally and internationally. Faculty members collaborate with investigators in an extremely large number of diverse disciplines.

New Admit Checklist

Know your:
- UID (University ID)
- UCLA email address
- Single Sign On (SSO) credentials

Make sure to complete:

☐ **Photo and Release Form:** Download, sign, and email the photo release and the photo that you would like us to use for the Student Roster to: F24_Ent.5024pptlb79qp3dd@u.box.com
   - Use the following file naming format "Last Name First Name-Photo Release" ex: "Bruin, Joe-Photo Release." And
   - Download and sign the "English (Adult)" version here.

☐ **Slack:** Join UCLA Slack if you have not done so. Invitations were sent out ealirer in summer.

☐ **Social Media:** Follow UCLA Biostatistics social media – while not mandatory, we hope you will follow the Biostatistics Instagram and Twitter feeds

☐ **Linkedin:** Create a LinkedIn Profile if you do not have one already and connect with UCLA Biostatistics on LinkedIn

☐ **BruinCard:** Apply for your BruinCard at least 5 business days prior to Orientation.

☐ **Bruin Safe Online:** Install the app on your smartphone

☐ **Test of Oral Proficiency (TOP):** For students whose first language is not English and wish to TA in the future, make sure to sign up to take the TOP.

☐ **ESLPE:** International graduate students entering UCLA are required to take the ESLPE exam.

Department Location, Website, and Administration

Biostatistics Department
UCLA Fielding School of Public Health
Department of Biostatistics
Room 51-254, Center for Health Sciences (CHS) Building
650 Charles E Young Dr S, Los Angeles, CA 90095

Website: https://ph.ucla.edu/departments/biostatistics

Dept. Chair: Damla Senturk
                        dsenturk@ucla.edu
                        Office: 51-253C CHS

Vice Chair: Kate Crespi
                        ccrespi@ucla.edu
                        Office: A2-125 CHS

Dept. Administrator: Ruzanna Margaryan
                        rmargaryan@ph.ucla.edu
                        Office: 51-254A CHS, (310) 825-5370

Fund Manager: Humphrey Duan
                        hduan@mednet.ucla.edu
                        Office: 51-254 CHS, (310) 825-5250

Student Affairs: Roxy Naranjo
                        rlnaranjo@ph.ucla.edu
                        Office: 51-236A CHS, (310) 267-2186

Department Hours: Monday – Thursday 8:30AM-4:00PM
                        Friday 8:30AM- 2:30PM

Biostatistics Faculty

Abdelmonem A. Afifi, Ph.D., Berkeley.
Professor Emeritus, Recall Faculty   Office #:   51-236B CHS
Joint appointment with Biomathematics   Phone #: (310) 825-0707
Email: afifi@ucla.edu   Fax #:   (310) 267-2113
Research Interests: Multivariate analysis, clinical trials, multilevel models and public health.

Brunilda Balliu, Ph.D., Leiden University, The Netherlands.
Assistant Professor
Joint appointment with Pathology and Laboratory Medicine; Computational Medicine
Email: bballiu@ucla.edu   Office #: 621 Charles E Young S Dr, Room 5215
Research Interests: Methods for high-dimensional and intensive longitudinal data.
Application to human genetics and functional genomics. Applications to wearable device and
smartphone sensors.

Sudipto Banerjee, Ph.D., University of Connecticut, Storrs.
Professor
Joint Appointment with Statistics; UCLA Institute of the Environment & Sustainability
Email: sudipto@ucla.edu   Office #:   51-254B CHS
                                                       Phone #: (310) 825-5916
                                                       Fax #:   (310) 267-2113
Research Interests: Statistical modeling and analysis of spatial-temporal data; Bayesian
statistics (theory and methods) and hierarchical modeling; Bayesian big data analysis;
statistical computing and related software development.

Thomas R. Belin, Ph.D., Harvard.
Professor   Office #:   51-267 CHS
Joint appointment with Psychiatry; Biobehavioral Sci. Phone #: (310) 206-7361
Email: tbelin@ucla.edu   Fax #:   (310) 206-7361
Research Interests: Missing Data, causal inference, record linkage, mental health research.

Ronald Brookmeyer, Ph.D., University of Wisconsin.
Professor and Dean   Office #:   51-253B CHS
Email: rbrookmeyer@ucla.edu   Phone #: (310) 825-2187
                                                       Fax #:   (310) 267-2113
Research Interests: Survival analysis, epidemic models, epidemiological methods, clinical
trials, AIDS/HIV, and Alzheimer's disease.

William G. Cumberland, Ph.D., Johns Hopkins.
Professor Emeritus, Recall Faculty   Office #:   51-236B CHS
Director, Biostatistics Core of CFAR   Phone #: (310) 206-9621
Email: wgc@ucla.edu   Fax #:   (310) 267-2113

Research Interests: Finite population sampling, stochastic modeling, applications to cancer, AIDS, and California Health Interview Survey.

Catherine M. Crespi, Ph.D., UCLA.

Professor In-Residence and Vice Chair	Office #: 51-239C CHS
Affiliation: Jonsson Comprehensive Cancer Center,	Phone #: (310) 206-9364
Center for Cancer Prevention and Control Research	Fax #: (310) 267-2113

Email: ccrespi@ucla.edu
Research Interests: Intervention studies, cluster randomized trials, longitudinal data, power and sample size methods, cancer prevention and control.

Dorota M. Dabrowska, Ph.D., Berkeley.

Professor Emerita	Office #: 51-236B CHS
Joint appointment with Statistics	Phone #: (310) 206-9624
Email: dorota@ucla.edu	Fax #: (310) 267-2113

Research Interests: Inference in nonparametric and semiparametric models, survival analysis, counting processes, data transformations.

Xiaowu Dai, Ph.D., University of Wisconsin.

Assistant Professor	Office #: MS 8917
Joint appointment with Statistics	Phone #: (424) 259-5110

Email: dai@stat.ucla.edu
Research Interests: Brain imaging analysis and biomedical research; neuroimaging, cardiovascular disease, kidney exchanges

David A. Elashoff, Ph.D., Stanford.

Adjunct Professor	Office #: 21-254C CHS
Joint appointment with Medicine	Phone #: (310) 794-7835
Email: dae@ucla.edu	Fax #: (310) 267-2113

Research Interests: Analysis of DNA microarray data: statistical methods for computing appropriate metrics for gene expression and gene filtering algorithms to isolate differentially expressed genes, analysis of protein mass-spectrometry data, clinical research in nursing and cancer.

Michele Guindani, Ph.D., Università Bocconi, Milano.
Professor
Email: mguindani@g.ucla.edu   Office: 76-062B CHS
Research Interests: Analysis of high-dimensional data, Neuroimaging data, Radiomics, Integrative genomics, and Microbiome. Statistical decision-making under uncertainty, Multiple comparison problems, Clustering, Bayesian modeling, and Bayesian Nonparametrics.

Andrew Holbrook, Ph.D., UC Irvine
Assistant Professor   Office #: 76-062A CHS
Email: aholbroo@ucla.edu   Phone #: (310) 794-5423

Fax #: (310) 267-2113

Research Interests: Bayesian statistics (theory and methods) and hierarchical modeling, computational statistics and high-performance computing, spatial epidemiology. Alzheimer's disease.

Grace Kim, Ph.D., UCLA
Professor In-Residence
Joint appointment with Radiological Science   Office #: 924 Westwood Blvd.
Email: gracekim@mednet.ucla.edu   Phone #: (310) 794-8679
                                                     Fax #:   (310) 794-8657

Research Interests: Classification, analysis in spatially and temporally correlated data, and pattern recognition of therapeutic response in medical imaging data.

Alexandra M. Klomhaus, Ph. D., UCLA
Assistant Adjunct Professor   Office #: 1100 Glendon Ave. Suite 850
Joint appointment with Medicine, Division of General Internal Medicine
Email: aklomhaus@mednet.ucla.edu
Research Interests: electronic health records (EHR) data, clinical applications of AI/ML models, methodological application to cardiology, adolescent behavioral health, Medicare and Medicaid claims data, and the UC Health Data Warehouse (UCHDW).

Seyoon Ko, Ph. D., Seoul National University
Assistant Adjunct Professor
Joint appointment with Mathematics   Office #: 5242 MS
Email: kose@math.ucla.edu   Fax #: (310) 206-6673
Research Interests: Computational statistics and high-performance computing; numerical optimization; data science and big data computing; machine learning; statistical genetics.

Martin L. Lee, Ph.D., UCLA.
Adjunct Professor   Office #: 51-236A CHS
Email: martin.l.lee@att.net   Phone #: (310) 781-3627
Research Interests: Robust statistical methods in Pharmacokinetics.

Gang Li, Ph.D., Florida State.
Professor   Office #: 51-253B CHS
Email: vli@ucla.edu   Phone #: (310) 206-5865
Research Interests: Survival analysis, analysis of receiver operating characteristic curves, nonparametric and semiparametric inference, longitudinal data analysis, statistical methods in medical imaging, ophthalmology, clinical trials, pharmaceutical statistics, and cancer.

Jingyi Jessica Li, Ph.D., UC Berkeley
Professor   Office #: MS 8951
Joint appointment with Statistics   Phone #: (310) 8255370
Email: jli@stat.ucla.edu   Fax #:   (310) 267-2113

Research Interests: *Developing new statistical methods for understanding biological questions, especially those related to large-scale genomic and transcriptomic data*

Honghu Liu, Ph.D., UCLA
Professor   Office #:   63-037A CHS
Joint Appointment with Dentistry   Phone #: (310) 794-0700
Email: hhliu@mednet.ucla.edu   Fax #:   (310) 206-2688
Research Interests: AIDS, compliance, Application to Dental Health.

Jason H. Moore, Ph.D., University of Michigan
Adjunct Professor
Email: moorejh@g.ucla.edu   Phone #: (310) 423-3521
Research Interests: Development, evaluation, and application of artificial intelligence and machine learning methods for developing predictive models of clinical outcomes including risk of common diseases such as cancer, cardiovascular disease, and neuropsychiatric diseases such as Alzheimer's.

Christina Ramirez, Ph.D., Cal Tech.
Professor   Office #:   21-257 CHS
Email: cr@ucla.edu   Phone #: (310) 825-7332
                                                               Fax #:   (310) 267-2113
Research Interests: Statistical genetics, Bayesian phylogeny, nonparametric and semi-parametric methods.

Panteha H. Rezvan, Ph.D., The University of Melbourne, Australia
Assistant Adjunct Professor
Joint Appointment with Children's Hospital LA
Email: phayatirezvan@ucla.edu
Research Interest: Methods for handling incomplete data, multilevel and longitudinal modeling, with applications to child and adolescent health, behavior, and HIV.

Damla Senturk, Ph.D., UC Davis.
Professor and Chair   Office #:   51-253C CHS
Email: dsenturk@ucla.edu   Phone #: (310) 206-5977
                                                               Fax #:   (310) 825-6402
Research Interests: Longitudinal and functional data analysis, hierarchical modeling, spatiotemporal modeling, nonparametric methods, big data, applications to mental health, neuroimaging and nephrology.

Marc A. Suchard, Ph.D., UCLA.
Professor   Office #:   AV-633 CHS/6-558 Gonda
Joint appointment with Human Genetics & Biomathematics   Phone #: (310)-825-0936/ 7442
Email: msuchard@ucla.edu   Fax #:   (310) 825-8685

Research Interests: Stochastic Processes, Applied Probability, Phylogeny, Longitudinal Modeling.

Catherine Ann Sugar, Ph.D., Stanford.
Professor In-Residence   Office #:   51-236C CHS
Joint appointment with Psychiatry/Biobehavioral Sci.   Phone #: (310) 794-1078
Email: csugar@ucla.edu   Fax #:   (310) 267-2113
Research Interests: Clustering, functional data analysis, classification and patterns of covariation in data, applications to HIV/AIDS, mental health, dentistry, nephrology, and particularly health services research.

Donatello Telesca, Ph.D., University of Washington.
Professor   Office #:   21-254 CHS
Email: dtelesca@ucla.edu   Phone #: (310) 825-6402
                                                                                      Fax #:   (310) 267-2113
Research Interests: Bayesian Inference, Bayesian Model Determination, Bioinformatics, Convolution Models, Cancer Research Decision Theory, Dependent Data, Functional Data Analysis, Markov Chain Monte Carlo Methods, Non-parametric Models.

Robert E. Weiss, Ph.D., Minnesota.
Professor   Office #:   51-269 CHS
Email: robweiss@ucla.edu   Phone #: (310) 206-9626
                                                                                      Fax #:   (310) 267-2113
Research Interests: Bayesian methods and computation, longitudinal data, diagnostics, graphics, hierarchical models, model selection and specification, applications to AIDS/HIV, bioinformatics, evolution and phylogeny, criminal justice, pediatric pain, community intervention studies.

Weng Kee Wong, Ph.D., Minnesota.
Professor   Office #:   51-239B CHS
Email: wkwong@ucla.edu   Phone #: (310) 206-9622
                                                                                      Fax #:   (310) 267-2113
Research Interests: Optimal design of experiments, linear models, pharmacokinetics, clinical trials, research in rheumatology, cancer control and prevention studies.

Hua Zhou, Ph.D., Stanford.
Professor
Email: huazhou@ucla.edu   Office #: 21-254A CHS
                                                                                      Phone #: (310)794-7835
Research Interests: Statistical computing, numerical optimization, statistical genetics, medical imaging, applied probability, stochastic modeling of HIV and cancer stem cell dynamics.

Jin Zhou, Ph.D., UCLA
Associate Professor In-Residence

Email: jinjinzhou@ucla.edu   Office #: 21-254C CHS
Research interests: Statistical genetics, biomedical informatics, electronic health records, smart health, longitudinal data, survival data, diabetes care.
Joseph Zoller, Ph.D., UCLA
Lecturer
Email: jaz18@g.ucla.edu
Research Interests: Epigenetic Clocks, Biomarkers for Aging, Omics-Based Biomarkers, HIV and HAART, Multicenter AIDS Cohort Study.

Emeriti Faculty

Abdelmonem A. Afifi, Ph.D., Berkeley.
Dean Emeritus and Professor Emeritus

Nancy Berman, Ph.D., American University.
Professor Emerita

Potter Chang, Ph.D., Minnesota.
Professor Emeritus

Virginia A. Clark, Ph.D., UCLA.
Professor Emerita

William G. Cumberland, Ph.D., Johns Hopkins.
Professor Emeritus

Dorota M. Dabrowska, Ph.D., Berkeley.
Professor Emerita

Frederick J. Dorey, Ph.D., Massachusetts.
Professor Emeritus

David Gjertson, Ph.D., UCLA.
Professor Emeritus

Donald Guthrie, Ph.D., Stanford.
Professor Emeritus
Joint appointment with Psychiatry and Biobehavioral Science
Areas of Interest: Applications in mental retardation and child psychiatry, statistical computing.

Robert I. Jennrich, Ph.D., UCLA.
Professor Emeritus
Area of Interest: Statistical computing.

Communication Tools and Software

Slack Channels

Along with email, Slack is a critical tool for program communication. Make sure to accept the invitation that was sent to join slack. Alternatively, please follow these steps to ask to join:

- Join the "UCLA Campus Community" slack workspace using your UCLA associated email at this link: https://ucla.enterprise.slack.com/workspace/T01A144TVB8
- Find your display name and change if desired (in bold next to your profile picture)
- Invitations have been sent out. If you have not joined, email Roxy at rlnaranjo@ph.ucla.edu.

Social Media and Networking

- LinkedIn: https://www.linkedin.com/company/uclabiostat?trk=public_post_feed-actor-name If you do not have a LinkedIn Profile, please create one. See LinkedIn help article: https://www.linkedin.com/help/linkedin/answer/a554351
- Instagram: @uclabiostatistics
- X (formerly Twitter): @UCLABiostat

Important Websites

- Fielding School of Public Health: ph.ucla.edu
- Department of Biostatistics: ph.ucla.edu/departments/biostatistics
- MyUCLA: my.ucla.edu
- BruinLearn: https://bruinlearn.ucla.edu/courses/288
- Create IT ticket https://ucla.service-now.com/ or call (310) 267-4357 (HELP) if you have any difficulty with the software requirements below

Logging into UCLA Systems: Single Sign On (SSO) and Multi-factor Authentication (MFA)
Many UCLA programs require that you use Single Sign-On and Multi-factor Authentication. To set this up, visit: https://ociso.ucla.edu/services/multi-factor-authentication-mfa

Zoom

Please follow the directions below or click here for directions with images to activate your account:

- Log In to create a UCLA Zoom account.
- Download Zoom for your computer. Note, you may also want to download on your mobile device.
    - In the Zoom App, Choose the "Sign In With SSO" button
    - Type "ucla" as the company domain

Adobe Reader and Adobe Creative Cloud

You are responsible for having Adobe Reader. UCLA Bruin Online (BOL) also offers students free access to Adobe Creative Cloud, which allows you access to Acrobat Pro, Photoshop Pro, and many other applications. For more information and instructions to access, visit: https://ucla.onthehub.com/WebStore/ProductsByMajorVersionList.aspx

UCLA Box

Cloud storage is provided to all students via Box. For more information on accessing your UCLA Box account, visit
https://it.ucla.edu/services/email-calendaring-collaboration/box/individual-box-accounts.

Campus Wi-Fi

There are different ways to get internet on campus. For information on Wireless Access points and how to connect to the internet, visit: www.it.ucla.edu/accounts/get-access/campus-wifi. During in-person classes and while in the CHS building, we recommend connecting to the wireless network, "eduroam."

- Select "eduroam" from the list of available wireless networks
- You will be prompted to enter your username and password.
- Username is your full Bruin OnLine (BOL) email address (i.e. joebruin@ucla.edu). Simply typing "joebruin" will not let you connect.
- Password is your BOL password.

If "eduroam" gives you a hard time, FSPH also has a "medguest" WIFI, which will take you to a secure single sign-on webpage. You will sign in using your BOL username and password.

The Master of Science in Biostatistics (M.S.)

Preparation for the Degree:

Mathematics preparation for the program should include at least two years of calculus. The prior coursework should cover material similar to that contained in the following UCLA courses:

- Mathematics 31A, B   Calculus and Analytic Geometry
- Mathematics 32A, B   Calculus of Several Variables
- Mathematics 33A, B   Matrices, Differential Equations, Infinite Series
- Mathematics 115A   Linear Algebra

Requirements for the Degree:

1. Course Requirements:

- Biostatistics 200 A, B, C   Methods in Biostatistics
- Biostatistics 202 A, B   Theoretical Principles of Biostatistics
- Biostatistics 216   Mathematical Methods for Biostatistics
- Biostatistics 244   Master's Seminar and Research Resources for Graduating MS Biostatistics Students
- Biostatistics 402A   Principles of Biostatistical consulting (2 units)
- Biostatistics 402B   Biostatistical Consulting
- Biostatistics 596   Directed Individual Study or Research for Masters Report (4 units)

- One 4-unit course in the Department of Epidemiology (either Epi100 or 200A)
- One 4-unit course addressing broad public health themes (PH C201 or HPM M242)
- A minimum of 24 units of electives in the Department of Biostatistics. The elective courses may be chosen from courses selected from Biostatistics 202C, 203A, 203B, 212-M215, 230-241 series, Biostatistics 406, 410, 411 and 413 (see page 44). Students may also apply for permission to use other courses, such as from the UCLA Department of Statistics, as electives by requesting permission via a blue petition (see page 44) in advance of taking the course (see page 51 for possible courses in the Department of Statistics). No more than one 4-unit course from the 400 series can count towards the minimum 24 units of electives for the degree

All required courses (except 402B) must be taken for a letter grade.

2. Master's Report:

A written report under the direction of a member of the Biostatistics faculty is required. In the spring of the second year of study, students take both Biostatistics 596 under the direction of a faculty member (faculty is identified by the student) and Biostatistics 244 to guide the report

preparation. Students should begin thinking about topics for their report in the beginning of their second year of study. The report must be handed in and approved before the end of the spring term of the second year of study (June 12, 2026) in order to graduate. For specific deadlines see page 34. Examples of Masters Reports from recent graduates are available for review in the Biostatistics Massey library.

3. The Comprehensive Examination:

This is a written comprehensive exam taken at the beginning of the second year of study in September. The scope of the exam includes material covered in the following biostatistics courses: 200A, 200B, 200C, 202A, and 202B. Students must pass the exam to receive the M.S. degree. Students have a maximum of 2 opportunities to pass the exam.

Failure to secure a passing score in at most two attempts on the MS Comprehensive exam will result in the department recommending the student to the Graduate Division for Academic Disqualification.

Advising Notes:

Every student is assigned an academic advisor who is a faculty member of the Department of Biostatistics. Students should meet with their advisor prior to the beginning of each quarter to discuss course selections. Students who have adequate prior background may petition to waive core course requirements. This requires approval from their academic advisor and department chair. However, the material from those courses would still be included in the required MS comprehensive exam.

UCLA students in the M.S Program in Biostatistics who are considering further study in the Ph.D. Program should see page 26 for additional information.

A typical course load is 12 units per term for first year students. It is recommended that you discuss with your academic advisor if you are considering taking a heavier course load.

Example of Sequence of Classes for the M.S. Program in Biostatistics

This sequence of classes is intended to serve only as an example of a two-year M.S. Program in Biostatistics. Students should meet with their faculty advisors to select electives which best suit their interests and goals.

	Fall	Winter	Spring
Year 1	Biostatistics 200A Biostatistics 216 Biostatistics 203A and/or Public Health C201	Biostatistics 200B Biostatistics 202A Biostatistics 203B and/or Biostatistics elective	Biostatistics 200C Biostatistics 202B Biostatistics 402A Epidemiology 100 or Biostatistics elective
	- M.S. Comprehensive Exam – Given at the beginning of fall term of Year 2 Scope of exam: 200A, B, C, 202A, B (see page 15)		
Year 2	Biostatistics elective Biostatistics elective or Public Health C201(if not previously taken) Biostatistics 402B*	Biostatistics elective Biostatistics elective Biostatistics elective	Biostatistics 244 Biostatistics 596 Epidemiology 100 (if not previously taken) Biostatistics elective
	* Biostat 402B is taken once during the second year (the quarter is determined at the beginning of fall term). Courses that count toward the Biostat elective requirement are: courses in the 200 series with course numbers of 203 and above, and no more than one course from the 400 series (see pages 49-50).		

Competencies for the M.S. Program in Biostatistics

Upon graduation, a student with an M.S. degree in Biostatistics should have acquired the following competencies:

1. Demonstrate mastery of the foundations of probability theory and biostatistical concepts.
2. Examine foundations of linear and generalized linear statistical models.
3. Employ computational methods of applied regression to analysis of biomedical data sets.
4. Provide effective biostatistical advice in collaborative research projects.
5. Communicate results of biostatistical research both orally and in writing.

The Master of Public Health in Biostatistics (M.P.H.)

Preparation for the Degree:

Mathematics preparation for the program should include at least one year of calculus:
- Mathematics 31A, B Calculus and Analytic Geometry
- Mathematics 32A Calculus of Several Variables

Requirements for the Degree:

1. Core Course Requirements in Public Health (12 units):

- Public Health 200A
- Public Health 200B
- Public Health 401

2. Course Requirements in Biostatistics:

M.P.H. students are required to take 3 core biostatistics methods courses in year 1. Typically, MPH students in biostatistics meet this requirement by completing one of the three series below:

- Biostatistics 200A, 201B, and 406
- Biostatistics 200A, 200B, and 200C
- Biostatistics 200A, 200B, and 406

The difference between the biostatistics methods sequences (200A, 201B, 406 vs. 200A, 200B, 200C) is that the 200 sequence has more technical and mathematical detail while the 201B/406 sequence focuses on more practical applications. The 200 sequence is taken by M.S. students in the Department of Biostatistics while the 201B/406 sequence is often taken by M.P.H. students in other departments in the School of Public Health. The decision of whether the Biostatistics 200 sequence is an appropriate fit should be made in consultation with the student's academic advisor, career goals and prior mathematical background. In order to register for the Biostatistics 200 sequence students will need a PTE (permission to enroll) number. To obtain a PTE number, students should contact Roxy Naranjo (rlnaranjo@ph.ucla.edu) and the 200-course instructor.

In addition to the 3 method courses above, students are required to take:

- Biostatistics 211A   Topics in Applied Regression
- Biostatistics 211B   Topics in Applied Regression
- Biostatistics 203A   Computer Management of Health Data
- Biostatistics 400   Applied Practice Experience (4 units)

- Biostatistics 402A   Principles of Biostatistical Consulting (2 units)
- Biostatistics 595   Effective Integration of Biostatistical Concepts in Public Health Research

and 12 units of biostatistics elective courses chosen from courses in the 200 series with course numbers from 203B, M208, 213 and above or from the 400 series.

Note: carefully check course prerequisites to ensure eligibility for the courses and consult with academic advisor, see biostatistics catalogue.

Required courses toward the degree must be taken for a letter grade.

3. Applied Practice Experience (APEx):

M.P.H. students in Biostatistics are required to complete an approved public health internship, referred to as an Applied Practice Experience (APEx) or field studies, of at least 400 hours to provide practical experience applying biostatistics. APEx is usually performed during the summer between the first and second year of the program. However, *requirements for satisfying APEx begin in the winter quarter of the first year of the program*. Students should consult the Biostatistics 400 handbook for details.

Students should begin identifying a suitable applied practice experience in the middle of their first year. The department will help with guidance and resources for identifying applied practice experience opportunities. APEx internships must be approved in advance.

Following the APEx internship, during the fall quarter of the second year, students enroll in 4 units of Biostatistics 400 ("Field Studies in Biostatistics").

Examples of sites where recent graduates have had applied practice experiences include the Los Angeles County Department of Public Health, Boston Scientific Corporation, and Cedars Sinai Medical Center.

4. The M.P.H. Culminating Experience:

The M.P.H. culminating experience in Biostatistics has written and oral components. In the spring quarter of their second year, the student must enroll in Biostatistics 595 with the faculty advisor supervising their project, and must complete the M.P.H. Culminating Experience written and oral components. The M.P.H. Culminating Experience promotes the ability of students to select relevant design and analysis techniques, synthesize knowledge, and apply insights to address public health problems.

The M.P.H. Culminating Experience Written Report should demonstrate application of material in the curriculum to a public health problem. The report is often motivated by the

APEx internship, but students can choose a different topic. The written report needs to be approved by the faculty member supervising the report. Examples of reports from recent graduates are available in the Biostatistics Library.

For the M.P.H. Culminating Experience Oral Presentation, the student presents the M.P.H. Culminating Experience Written Report to a faculty committee (consisting of a minimum of 3 members of the Biostatistics faculty, including the written report advisor) and answers related questions. The student must receive a pass from the faculty committee. Students should submit the Culminating Experience for the M.P.H. in Biostatistics form to Roxy Naranjo at least 1-2 weeks prior to scheduling the oral presentation.

The Oral Presentation and Written Report may be repeated only once.

Example of Sequence of Classes for the M.P.H. Program in Biostatistics

This sequence of classes is intended to serve as an example of a two-year M.P.H. Program in Biostatistics. In general, the faculty recommends that students take required courses in the sequence shown below. Students should meet with the faculty advisor to select electives which best suit their interests and goals.

	Fall	Winter	Spring
Year 1	Biostatistics 200A Biostatistics 203A Public Health 200A	Biostatistics 201B or 200B Biostatistics 203B (elective) Public Health 200B	Biostatistics 406 or 200C Biostatistics elective Biostatistics 402A
Year 2	Biostatistics 211A Biostatistics 400 Public Health 401	Biostatistics 211B Biostatistics elective Biostatistics elective	Biostatistics elective Biostatistics elective Biostatistics 595

A typical course load consists of 12 units. It is recommended that you consult with your academic advisor if you are considering taking a heavier course load.

Competencies for the M.P.H. Program in Biostatistics

Upon graduation, a student with an M.P.H. degree in Biostatistics should have obtained core competencies in public health (including biostatistics, community health sciences, environmental health, epidemiology, health policy and management, and cross cutting competencies). A complete list of these competencies is available [here](). In addition, an MPH graduate with specialization in biostatistics should have acquired the following additional competencies:

1. Demonstrate mastery of fundamental concepts of statistical analysis for datasets from health studies.
2. Employ computational methods for analysis of public data sets.
3. Recommend research study designs to support public-health-relevant data analyses.
4. Contribute to the analysis of public health studies in collaborative multidisciplinary teams.
5. Prepare written and oral presentations providing public health insights based on statistical analyses.

The Doctor of Philosophy in Biostatistics (Ph.D.)

Preparation for the Degree:

Mathematics preparation for the program should include at least two years of calculus. The prior coursework should cover material similar to that contained in the following UCLA courses:

- Mathematics 31A, B   Calculus and Analytic Geometry
- Mathematics 32A, B   Calculus of Several Variables
- Mathematics 33A, B   Linear Algebra & Applications, Differential Equations
- Mathematics 115A   Linear Algebra

UCLA students in the M.S. Program in Biostatistics who are considering further study in the Ph.D. Program should see page 26 for additional information.

Requirements for the Degree:

1. Course Requirements:

- Biostatistics 200 A, B, C   Methods in Biostatistics
- Biostatistics 202A, B   Theoretical Principles of Biostatistics
- Biostatistics 216   Mathematical Methods for Biostatistics
- Biostatistics 250A, B   Linear Models
- Biostatistics 250C   Multivariate Biostatistics
- Biostatistics 257   Statistical Computing
- Biostatistics 245 & 246   Doctoral Seminar (see note A below)
- Biostatistics 409   Biostatistics Consulting (see note B on page 24)
- Mathematics 131A*   Real Analysis

- One 4-unit course in Epidemiology (either Epi 100 or 200A)
- One 4-unit course in broad public health themes (PH C201 or HPM M242)

- Minimum of 6 4-unit elective biostatistics courses (24 units).
The elective courses may be chosen from courses in Biostatistics 202C, 210, 213 and above. To fulfill the six elective courses, students may formally petition (using a blue petition) to enroll in courses in Statistics and Biomathematics. (See page 51 for a list of some possible courses).

*Mathematics 131A must be taken in year 1 by students with limited or no prior experience to Real Analysis.

Required courses must be taken for a letter grade (except Biostatistics 245 & 409).

A typical course load is 12 units for first year students. It is recommended that you consult with your academic advisor if you are considering taking a heavier course load.

NOTE A
Beginning in the second year of graduate study at UCLA, all students in the doctoral program must enroll in Biostatistics 245, which involves attending the Departmental seminar series. In addition, students must also enroll in Biostatistics 246 for two consecutive years. Biostatistics 246 helps prepare students to give statistical and scientific presentations.

NOTE B
All registered doctoral students must also enroll in Biostatistics 409 (doctoral statistical consulting seminar: field training course) for two consecutive quarters before advancement to candidacy.

2. Ph.D. Preliminary Written Examination:

Students must pass one written examination, the PH.D. Preliminary Exam. **Failure to secure a passing score in at most two attempts in the PH.D. Preliminary Exam will result in the department recommending the student to the graduate division for academic disqualification.**

This exam is offered in September just before the beginning of fall classes. Students generally take this exam in the beginning of their second year of study. Students are expected to pass the exam at a level that would predict successful completion of the Ph.D. program. The Ph.D. Preliminary Examination covers material in the following courses and is normally taken as soon as possible after having satisfactorily completing the relevant coursework:

- Biostatistics 200 A, B and C
- Biostatistics 202 A, B

Students must pass the exam at a level expected of doctoral students.
Students have a maximum of two attempts to pass the exam.
Students **with** a prior master's degree in Biostatistics from UCLA are **exempt** from taking the Ph.D. Preliminary Examination, as it was taken during their MS study.

3. Oral Qualifying Exam:

The oral qualifying exam evaluates the student's understanding of statistical theory, ability to apply the theory, and reviews the proposed dissertation topic. The student should prepare a written dissertation proposal. The proposal should include background, preliminary work, and a research plan for carrying out the work. While there are no absolute page

requirements, the proposal is typically between 15 to 50 pages with additional pages for figures and references. The proposal should be distributed to members of the dissertation committee in advance of the exam. Generally, the proposal is expected to be delivered to committee members at least two weeks before the scheduled oral exam; if the student expects that the proposal will be delivered less than two weeks before the exam, the student should check with each committee member for advance approval. During the oral exam, the student will present and defend the proposed work. The student can expect that most of the questions will pertain to the proposal, however additional questions may be asked to assess general understanding of biostatistical principles. The overall objective of the exam is to evaluate whether the student has the ability and adequate plans for conducting Ph.D. dissertation research.

The dissertation committee is formed in consultation with the student's advisor/dissertation chair and should consist of 4 faculty members. Special rules apply as to which faculty may serve on the committee, and students should check with the SAO (Roxy Naranjo) to confirm that the committee is appropriately composed. For the form and regulations on how to form the doctoral committee visit: https://grad.ucla.edu/gasaa/library/docnomin.pdf

Students **without** a prior master's degree or equivalent in Biostatistics are expected to take the Oral Qualifying Examination within the first three years of the PhD study.

Students **with** a prior master's degree in Biostatistics from UCLA are expected to take the Oral Qualifying Examination within the first two years of their PhD study.

Passing this examination is required before a student is officially advanced to candidacy. A failed examination may be repeated once on the recommendation of the committee.

4. Ph.D. Dissertation Oral Defense:

The PH.D. Dissertation is original research that advances the field of biostatistics. The dissertation is completed under the guidance of a Biostatistical faculty member who serves as the adviser. Examples of dissertations from previous graduates are available in the Biostatistics Library. After successfully completing a dissertation, an oral examination defending the dissertation is conducted by the dissertation committee. A failed examination may be repeated once on the recommendation of the committee.

NOTES FOR PH.D. APPLICANTS WHO ARE EITHER CURRENTLY IN THE UCLA M.S. PROGRAM IN BIOSTATISTICS OR ARE RECENT GRADUATES OF THE PROGRAM

The following **applies** to students who are currently in the M.S. degree or have completed the M.S. degree in Biostatistics at UCLA and wish to be considered for the Ph.D. program or have been admitted to the Ph.D. program:

- Students who enter the Ph.D. program in Biostatistics having completed the UCLA M.S. Program in Biostatistics typically begin their Ph.D. program with year 2 course work in the chart on page 27

- Students who enter the Ph.D. program in Biostatistics having completed the UCLA M.S. Program in Biostatistics and have previously taken some Biostatistics electives for their M.S. degree that also qualify as electives for the Ph.D. program may apply up to 3 of such 4-unit courses toward the Ph.D. requirement of 6 courses.

- Students who enter the Ph.D. program in Biostatistics having completed the UCLA M. S. Program in Biostatistics and whose performance on the M.S. comprehensive exam was superior and at a level that indicates the student is prepared to proceed with more advanced doctoral coursework are not required to take the Ph.D. preliminary exam.

- Student who entered the Ph.D. program in Biostatistics having completed the UCLA M.S. program in Biostatistics and fulfilled the requirement of one 4-unit course in Epidemiology and one 4-unit course in broad public health themes are exempt from these requirements.

- Current M.S. students who plan to apply for admission to the Ph.D. program should take Mathematics 131A during their M.S. program.

Example of Sequence of Classes for the Ph.D. Program in Biostatistics

This sequence of classes is intended to serve as a guide for students in the Ph.D. program. Students should meet with their advisor to determine the optimal course sequence and to select electives which best suit their interests and goals. The sequence of classes to be taken during the first year of study depends on the student's background. Entering Doctoral students should consult with their academic advisor to determine a sequence of courses to best prepare the student for the written preliminary exam.

	Fall	**Winter**	**Spring**
Year 1	Biostatistics 200A Biostatistics 216 Public Health C201 or Biostatistics 203A or Mathematics 131A	Biostatistics 200B Biostatistics 202A Biostatistics 203B or Mathematics 131A	Biostatistics 200C Biostatistics 202B Epidemiology 100 Mathematics 131A
	- Ph.D. Preliminary Examination - Given at the beginning of fall term – Scope of exam: 200A, B, C, 202A, B (see pg. 21)		
Year 2	Biostatistics 250A Biostatistics 245 Biostatistics elective	Biostatistics 250B Biostatistics 245 Biostatistics elective	Biostatistics 250C Biostatistics 257 Biostatistics 245 Biostatistics 246
Year 3	Biostatistics elective Biostatistics 409 Biostatistics 245 Public Health C201 or Biostatistics elective	Biostatistics elective Biostatistics 409 Biostatistics 245	Biostatistics elective or Epidemiology 100 Biostatistics 245 Biostatistics 246

Competencies for the Ph.D. Program in Biostatistics

Upon graduation, a student with a Ph.D. degree in Biostatistics should have acquired the following competencies:

1. Demonstrate mastery of advanced theory and applications of statistical models.

2. Develop algorithms to implement advanced biostatistical methodologies.

3. Present effective seminars on biostatistical research and research in public health sciences.

4. Promote effective use of biostatistics in collaborative team research on public health problems.

5. Develop original research in the theory/methodology of biostatistics and demonstrate its application in a substantive field.

Academic Calendar 2024-2025

The academic calendar for the current and future years is available at
https://www.registrar.ucla.edu/Calendars/Annual-Academic-Calendar

Fall Quarter 2024	
Quarter begins	Monday, September 23
Instruction begins	Thursday, September 26
Study List deadline (becomes official)	Friday, October 11
Veterans Day holiday	Monday, November 11
Thanksgiving holiday	Thursday-Friday, November 28-29
Instruction ends	Friday, December 6
Common final exams	Saturday-Sunday, December 7-8
Final examinations	Monday-Friday, December 9-13
Quarter ends	Friday, December 13
Christmas holiday	Tuesday-Wednesday, December 24-25
New Year's holiday	Tuesday-Wednesday, December 31-January 1, 2025
Winter campus closure	TBD

Winter Quarter 2025	
Quarter begins	Thursday, January 2
Instruction begins	Monday, January 6
Martin Luther King, Jr. holiday	Monday, January 20
Study List deadline (becomes official)	Friday, January 17
Presidents' Day holiday	Monday, February 17
Instruction ends	Friday, March 14
Common final exams	Saturday-Sunday, March 15-16
Final examinations	Monday-Friday, March 17-21
Quarter ends	Friday, March 21

Spring Quarter 2025	
Quarter begins	Wednesday, March 26
César Chávez holiday	Friday, March 28
Instruction begins	Monday, March 31
Study List deadline (becomes official)	Friday, April 11
Memorial Day holiday	Monday, May 26
Instruction ends	Friday, June 6
Common final exams	Saturday-Sunday, June 7-8
Final examinations	Monday-Friday, June 9-13
Quarter ends	Friday, June 13

Tentative Biostatistics Course Schedule 2024-2025

For the most updated course schedule information and classroom assignments, visit:
https://sa.ucla.edu/ro/Public/SOC

Fall 2024

Course	Title	Instructor	Time/Day
Biostat 120	Biostatistics in Public Health	R. Brookmeyer	TR 1-2:50pm
Biostat 200A	Methods in Biostatistics A	A. Klomhaus	TR 8-9:50am
Biostat 201A	Introduction to Biostatistics	M. Lee	MW 2:30-4:20pm
Biostat 202C	Theory of Bayesian Statistics	M. Guindani	M 1-2:50pm W 1-1:50pm
Biostat 203A	Introduction to Data Management and Statistical Computing	G. Kim	MW 1-2:20pm
Biostat 211A	Topics in Applied Regression	T. Belin	MWF 9-9:50am
Biostat 213	Introduction to Computational Methods in Biostatistics	C. Ramirez	MW 10-11:50am
Biostat 216	Mathematical Methods for Biostatistics	H. Zhou	TR 10-11:50am
Biostat M236	Longitudinal Data	R. Weiss	TR 1-2:50pm
Biostat 245	Advanced Seminar: Biostatistics	G. Li	MW 3-4:50pm
Biostat 250A	Linear Statistical Models	W. Wong	M 5-6:50pm W 5-5:50pm
Biostat 402B	Biostatistical Consulting	D. Elashoff	R 3-4:50pm
Biostat 409	Doctoral Statistical Consulting Seminar	T. Belin	M 10-11:50am
Biostat 496	Teaching Biostatistics	J. Zoller	T 3:30-5:20pm

Winter 2025 (Tentative)

Biostat 121	Biostatistics in Public Health	J. Zoller	TBD
Biostat 200B	Methods in Biostatistics B	A. Holbrook	MWF 11-11:50pm
Biostat 201B	Introduction to Biostatistics	J. Zoller	MW 1-2:50pm
Biostat 211B	Topics in Applied Regression	C. Sugar	MWF 9-9:50am
Biostat 202A	Mathematical Statistics A	D. Senturk	M 1-2:50pm W 1-1:50pm
Biostat 203B	Introduction to Data Science in R	H. Zhou	T 3-4:50pm R 3-3:50pm
Biostat M215	Survival Analysis	G. Li	TR 10-11:50am
Biostat 231	Statistical Power and Sample Size Methods for Health Research	C. Crespi	MWF 9am-9:50am
Biostat M232	Statistical Analysis of Incomplete Data	T. Belin	M 11am-12:50pm R 11am-11:50am
Biostat M239	Mathematical and Statistical Phylogenetics	M. Suchard	MW 9-10:50am
Biostat 245	Advanced Seminar: Biostatistics	D. Senturk	MW 3-4:50pm
Biostat 246	Doctoral Students Seminar	P. Rezvan	MW 3-4:50pm
Biostat 250B	Linear Statistical Models	W. Wong	W 9-10:50am F 3-4:50pm
Biostat 402B	Biostatistical Consulting	F. Yu	M 3-4:50pm
Biostat 409	Doctoral Statistical Consulting Seminar	G. Li	T 9-10:50pm
Biostat 496	Teaching Biostatistics	J. Zoller	F 10-11:50am

Spring 2025 (Tentative)

Biostat 100A	Introduction to Biostatistics	M. Lee	MW 8-9:50am
Biostat 200C	Methods in Biostatistics C	J. Zhou	T 10-11:50am R 10-10:50am
Biostat 202B	Mathematical Statistics B	M. Guindani	M 10-11:50am W 10-10:50am
Biostat M235	Causal Inference	F. Stoffi	TBD
Biostat M238	Methodology of Clinical Trials	W. Wong	W F 5pm-6:30pm
Biostat 244	Master's Seminar & Research Resources for Graduating Biostatistics MS Students	C. Ramirez	TR 1-2:50pm
Biostat 245	Advanced Seminar: Biostatistics	C. Ramirez	WF 3-4:50pm
Biostat 246	Doctoral Students Seminar	G. Li	M 3-4:50pm
Biostat 250C	Multivariate Biostatistics	S. Banerjee	M 1-2:50pm W 1-1:50pm
Biostat M257	Computational Methods for Biostatistical Research	H. Zhou	T 1-2:50pm R 1-1:50pm
Biostat 270	Stochastic Processes	A. Holbrook	T 3-4:50pm F 10-11:50am
Biostat 285	Advanced Topics: Recent Developments	M. Guindani	TR 10-11:50am
Biostat 402A	Principles of Biostatistical Consulting	G. Li	F 1-2:50pm
Biostat 406	Applied Multivariate Biostatistics	D. Telesca	TR 4-5:20pm

Academic Standards and Procedures at UCLA

General Information

General regulations concerning graduate courses, standards of scholarship, disqualifications, appeals, leave of absences, normal progress toward degree, withdrawals and other matters can be found at: https://grad.ucla.edu/gasaa/library/spfgs.pdf
The site also provides detailed information and sets forth general policies regarding completion of degree requirements, master's and doctoral committees and examinations.

The school-wide Fielding School of Public Health 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-Friday 10:00am-3:00pm. Room 16-068 Center for Health Sciences. Phone Number: (310) 825-5524.

English as a Second Language

All international graduate students are required to take the ESLPE. You were notified as part of your admissions offer from the university if you are required to take the ESLPE. For an explanation of the requirement, see "English Language Proficiency" in the UCLA Catalog and visit the Writing Requirement for International Graduate Students here.

Full-Time Student Status

To be considered a full time UCLA graduate student, students must be enrolled for a minimum of 8 units per quarter. Students holding GSR, teaching assistantship, or special reader positions must be enrolled for a minimum of **12 units.**

Advancing to Candidacy

M.S. and M.P.H. Degrees:

Students who wish to graduate in the spring quarter must petition for advancement to candidacy prior to the deadline. This deadline will be announced at the graduation workshop, which will be held in February. Advancement to candidacy is a requirement for all M.S. and M.P.H. degree candidates. If you miss the workshop, petitions for advancement to candidacy can be picked up in the Student Affairs Office, Room A1-269 CHS. The forms must be completed and returned to the Student Affairs Office. Please be sure to complete all required information and follow special instructions per the direction on the forms or by the Student Affairs Office Staff.

Students who wish to graduate in the fall or winter quarters must petition for Advancement to Candidacy prior to the end of the second week of the chosen quarter.
The Student Affairs Office posts the specific deadlines.

In addition to completing all the required course work, M.S. students are required to complete a written M.S. report as part of their graduation requirement. This report is part of the Biostatistics 596 course requirement and is due in the final term of study, usually spring term. The final version of the M.S. report should be emailed to Roxy Naranjo once it is approved by the M.S. report advisor.

Doctoral Degree:

Advancement to candidacy is also a requirement for students in the Ph.D. program. Before advancing to candidacy, doctoral students must form their doctoral dissertation committee by filling out the Nomination of Doctoral Committee form and submitting it to Roxy Naranjo. Students should schedule to meet with Roxy Naranjo for a brief 10–15-minute meeting to discuss their planned committee members and obtain information about the process.

Students normally form their dissertation doctoral committee upon completion of the required coursework (or during the term completing the last required courses). To obtain the necessary forms and policy on how to officially form your Doctoral Dissertation Committee, visit: http://www.gdnet.ucla.edu/gasaa/library/degreeinfo.htm#Doctoral

Only once the doctoral committee is officially approved by the Graduate Division, students may take their Oral Qualifying Examination & Advancement to Candidacy. Students are responsible for informing their committee members of the date and time that best works for everyone for the Oral Qualifying & ATC. They must also inform Roxy Naranjo of the date and time, at least two weeks prior to the exam. Students should also secure a meeting room for the Oral Qualifying & ATC by emailing Humphrey Duan (hduan@mednet.ucla.edu). The students are responsible for paying the Advancement to Candidacy fees on Bruin Bill.

Academic Disqualification and Appeal

A graduate student may be disqualified from continuing in the graduate program for a variety of reasons. One reason is failure to maintain the minimum cumulative GPA of 3.0. The conditions when that could happen and procedures for appeal are described at https://grad.ucla.edu/gasaa/library/spfgs.pdf. Students feeling academically challenged should consult with their advisers.

Academic Integrity

With its status as a world-class research institution, it is critical that the University uphold the highest standards of integrity both inside and outside the classroom. As a student and member of the UCLA community, you are expected to demonstrate integrity in all of your academic endeavors. Accordingly, when accusations of academic dishonesty occur, The Office of the Dean of Students is charged with investigating and adjudicating suspected violations. Academic dishonesty includes, but is not limited to, cheating, fabrication, plagiarism, multiple submissions or facilitating academic misconduct. For more information, visit: https://www.deanofstudents.ucla.edu/Academic-Integrity.

Leave of Absence

Continuing graduate students in good academic standing (3.0 GPA or above) who have completed at least one quarter of academic residence at UCLA may petition to take a leave of absence if approved by the Home Department and the Graduate Division. Graduate students are allowed a maximum of three quarters of official leave of absence. Federal policy governing students on F-1 and J-1 visas restricts leaves of absence to certain conditions. To petition for a leave of absence, fill out a "Leave of Absence Request" form, and submit it to the SPH Student Affairs Office.
For more details: http://www.gdnet.ucla.edu/gasaa/library/loa.htm

Filing Fee

The filing fee is used for filing a dissertation or thesis and/or formal final examination for the doctor's or the master's degree when a candidate has completed all other degree requirements. Graduate students (who meet the criteria listed on the Filing Fee Application) can apply for a Filing Fee and pay a nominal fee in lieu of standard tuition and registration fees. Filing Fee is intended for students who are in good academic standing and who have completed all degree requirements except for filing their dissertation or thesis, submitting their capstone project, or taking their comprehensive exam. While on Filing Fee status, a student may no longer: take courses, be employed by UCLA, receive financial support, or access certain campus services. Please refer to the Status and Filing Fee Eligibility Flow Chart to assist with determining eligibility for Filing Fee usage.
For detailed information on the filing fee requirements and to access the Filing Fee application, visit: https://grad.ucla.edu/academics/graduate-study/filing-fee-application/.

Students may use the Filing Fee application only if they were registered for the previous academic term and satisfy the eligibility criteria.

Students may only apply, pay and be on a filing fee <u>one</u> time.

Health & Wellness

Arthur Ashe Student Health and Wellness Center

All registered graduate students may use the Arthur Ashe Student Health and Wellness Center, an outpatient clinic geared to the needs of students at UCLA. The Ashe Center offers a full range of clinical and support services, most of which are prepaid by student registration fees. The clinical staff is composed of highly qualified doctors, nurse practitioners, and nurses.
https://www.studenthealth.ucla.edu/

Mental Health Resources: Counseling and Psychological Services (CAPS)

UCLA has resources to help support you through challenging times. If you ever need someone to talk to and would prefer to speak with a professional, the UCLA Counseling & Psych Services team is more than equipped to be that someone for you. The center provides confidential individualized therapy and psychiatric care, provided by a diverse and multicultural competent professional staff. CAPS is a warmly welcoming environment located centrally on the UCLA campus. CAPS also provides a range of programs to promote mental health, emotional resilience and wellness throughout the campus community. The 24-hour telephone access line is (310) 825-0768. Crisis counseling available 24-hours a day by phone. Visit: https://counseling.ucla.edu/.

The Biostatistics Department is here to support you. If you ever need anything or don't know where to start, reach out to Roxy Naranjo your SAO, or any of the faculty members, who will be there to help you and guide you to connect you with campus resources.

Exercise and Recreation

Students can obtain a gym membership for free starting the first day of fall quarter. UCLA Recreation offers state-of-the-art fitness workouts, masters swim workouts, intramural and club sports, dozens of recreation classes, water sports at the Marina Aquatic Center, and open recreation at most campus facilities. Across from the Ackerman Student Union, you will find the Wooden Fitness Center. The BruinCard is required to enter the Center. This

facility offers many different types of fitness and recreation classes, as well as various exercise machines and a full weight room. For information, contact Cultural and Recreational Affairs (310) 825-3701 or visit www.recreation.ucla.edu.

Medical Insurance Requirement / Waiving Ship

As a condition of registration, the University requires that all graduate and professional students, including international students on non-immigrant visas, have medical insurance coverage that meets the University's minimum requirements. Contact the Insurance Office on the fourth floor of the Arthur Ashe Student Health and Wellness Center for details regarding the campus Student Health Insurance Plan.
https://www.studenthealth.ucla.edu/insurance

Center for Accessible Education (CAE)

The UCLA Center for Accessible Education (CAE) provides services designed to meet the unique educational needs of regularly enrolled, matriculated students with documented permanent and temporary disabilities. CAE provides access to the numerous educational opportunities available to students on our campus and empowers students to realize their academic potential.

To obtain disability-related accommodations and services through the CAE, students should complete a Request for Services form and upload appropriate documentation. Students may also download and complete a printable version of the Request for Services form and email or fax it to the CAE at (310) 825-9656. For more information visit: https://www.cae.ucla.edu/

Services are designed to meet the unique educational needs of regularly enrolled students with documented permanent and temporary disabilities.

Graduate Student Resource Center

For academic support, the UCLA Graduate Student Resource Center offers many resources for students, including writing and public speaking workshops. https://gsrc.ucla.edu/

Campus Safety

UCLA Bruins Safe Online

Bruins Safe is an essential tool to enhance your safety at UCLA. The app will send you important safety alerts and provide instant access to campus safety resources. BruinsSafe is the official mobile safety app of UCLA. We strongly encourage you to install the app on your smartphone. https://bso.ucla.edu/

Bruins Safe benefits include:

- Safety notifications: Receive instant notifications and instructions from campus safety when on-campus emergencies occur.
- Emergency help: Contact campus safety staff quickly for help in an emergency.
- Campus safety resources: Access all important safety resources in one convenient app.

To report an emergency, call 911. Non-emergency calls can be reported to the UCLA Police Department at (310) 825-1491 (https://police.ucla.edu/). **The UCLA Police Department offers a variety of information on community outreach, crime prevention, and safety and security services.**

Campus Escort Service

Campus Security Officers are available for a walking escort free of charge to students, faculty, staff, or visitors 365 days a year from dusk until 1 a.m. The campus escort services are provided between campus buildings, local living areas, and the Westwood Village within the approximate boundaries of Sunset Boulevard to the north, Hilgard Avenue to the east, Wilshire Boulevard to the south, and Veteran Avenue to the west. You may call the provided number for a campus escort. Please allow fifteen to twenty minutes for your campus escort to arrive. https://police.ucla.edu/cso/evening-escorts or **(310) 794-WALK**

UCLA SafeRide

The UCLA SafeRide provides a safe means of transportation around campus during **evening hours M-F**. The vans provide transportation between campus buildings, on-campus housing, and nearby residential areas. The service is free for UCLA students, employees, and visitors. Route maps and link to downloadable app are available: https://transportation.ucla.edu/getting-around-campus/nighttime-safety-mobility

Office of Equity, Diversity and Inclusion (EDI)

UCLA's Office of Equity, Diversity and Inclusion (EDI) leads and advances strategies for enhancing equity, diversity and inclusion; protecting civil rights; and upholding dignity for all in our community. For more information visit: https://equity.ucla.edu/

Title IX/Sexual Harassment

Every member of the University community should be aware that the University will not tolerate sexual harassment and that such behavior is prohibited both by law and by university policy. The University will take whatever action is necessary to prevent and correct such behavior and, if appropriate, discipline persons whose behavior violates this policy. For more information on disciplinary actions, visit the website of the Dean of Students https://deanofstudents.ucla.edu/.

Any student who believes that they have been sexually harassed may contact a Sexual Harassment Information Center counselor for help and information. Complete details on contacting a counselor and a link to the complete UC policy on sexual harassment are available on the Dean of Students' website. Scroll down to "Student Conduct" and then select "Responding to Reports of Sexual Harassment."

Emergency Situations and Emergency Preparedness

No one knows when an emergency will occur, so everyone should understand basic safety practices. Be prepared to respond safely to fire, earthquake, or other emergency situations. For more information visit Student Affairs Emergency Preparedness: https://emergency.studentaffairs.ucla.edu/.

Parking & Transportation

Public Transportation

UCLA highly encourages the use of public and alternate transportation. Please visit www.transportation.ucla.edu to learn more about alternate methods of getting to campus and for more info about public transportation to Westwood.

Parking

Information on how to apply for a parking permit, vanpool, rideshare, GoBruin bus program, and other available transportation services, go to: https://main.transportation.ucla.edu/campus-parking. Their office is located at 555 Westwood Plaza, corner of Westwood Blvd. & Strathmore Avenue (in front of Parking Structure 8, Level 2).

Biostatistics Student Affairs Office

The Student Affairs Officer (SAO) for the Biostatistics Department is Roxy Naranjo. Her office room number is 51-236A CHS, phone number is (310) 267-2186 and her email is rlnaranjo@ph.ucla.edu.

If you have any question about degree requirements or academic procedures, an excellent first step to get your questions answered or issues resolved is to contact Roxy Naranjo.

The Biostatistics Department's SAO works with students providing advice on how to get the most out of their graduate experience, navigating relationships with faculty, and the university's policies and procedures. The SAO's main responsibilities include helping students understand and comply with university rules and regulations and assisting them in navigating through administrative issues related to their degree. The SAO is a key resource for students to get assistance on all related student matters. In addition, the SAO also focuses on providing additional assistance to at-risk students who are struggling academically, personally, financially or mentally and helps them in finding targeted services to support them.

Biostatistics Faculty Advising

Students are assigned a faculty advisor prior to the beginning of their academic program. Students should initially contact their advisors to discuss their course of study and thereafter should stay in contact on a regular basis. Students are expected to meet with their advisors at least once per quarter to discuss academic progress, problems, and courses. Students may change advisors. A blue student petition should be used for this request. Approval by both the faculty member and the Biostatistics Department Chair must be obtained.

The Frank J. Massey Biostatistics Library

The Department of Biostatistics Library is named in honor of Frank J. Massey, Jr., Ph. D, a long time UCLA School of Public Health faculty member. The library is accessed through the main office of the Department of Biostatistics (51-254A CHS) and is located on the right as you enter the main office.

The Library has books, journals, and dissertations from prior graduates and a large conference table. Students are very welcome to work in the library if it has not been previously reserved for an event. The library is also used for Biostatistics faculty meetings, student exams, and other events.

Items may be checked out with the following procedures:
- Masters' Reports, Journals, and doctoral Dissertations are only for *2-hour* check-out. Bring your student ID & item(s) to Student Affairs Officer Roxy Naranjo for a *2-hour* check out.
- All other books should be checked out using the following procedure: find the pocket inside the book; fill out a book card and file it in the box located in the library by the author's name.

For questions, please see Humphrey Duan, Roxy Naranjo, or Ruzanna Margaryan; fill out the check-out sheet located in the blue binder with name, date, and email. To return books, please leave items next to the book catalog and sign-out from the check-out sheet. All check-out items are due within *3 weeks* of the borrowed date.

Biostatistics Student Office Space

The Biostatistics Department has two office rooms for biostatistics graduate students, A1-228 CHS and A1-227 CHS. These offices are located on the A level of the Fielding School of Public Health.

A1-228 CHS is available to all masters and doctoral students in the Department of Biostatistics

A1-227 CHS is only available to students who have passed the written comprehensive doctoral exam.

To obtain a space, please complete the application provided to you during orientation which can also be found on the Dept. website or email Roxy Naranjo.

Biostatistics Seminar Series

The Department has a regular seminar series that is open to all students and faculty. The seminar speakers include biostatisticians from around the world who come to speak about their work and issues in the field of biostatistics. The seminars are typically held on Wednesdays during the academic year at 3:30PM in one of the lecture halls in the Center for Health Sciences. The seminars generally end by 4:30PM. **Please keep up with email/Slack announcements for updates.**

Refreshments are usually available prior to the seminar, at 3PM, in the Massey Biostatistics library. Usually, these gatherings allow for informal chatting, socializing and an opportunity to meet the seminar speaker. For virtual seminars, these gatherings may not be offered. Please see each seminar's associated flyer for more information.

Notices are posted on slack about the upcoming seminar for the week.

Biostatistics Social Events

The Department has several social events each year. We very much want you to come to these events - they let all of us get to know each other in a less formal atmosphere.

Below is a list of what the department normally offers:

- Fall term Welcome-to-UCLA Student Event
- Winter potluck Holiday Party in December is usually in the Massey Biostatistics Library.
- Pizza lunch for students and faculty. Pizza day is normally in the Biostatistics Library.
- Lunch with the Chairs – once a term in the Biostatistics Library.

Student Mail

Each student has a folder in which they can receive mail. The folders are located in the main office (51-254 CHS). As you walk in the office, the folders are in a file cabinet on your left. Announcements and mail arriving at the Biostatistics office will be placed in your folder. Students should check their mail folders regularly. Please do not have personal mail sent to the Department.

Student Employment Opportunities

Graduate students in biostatistics are often able to find employment related to biostatistics (e.g. special readers, teaching assistants (TAs), or graduate student researchers (GSRs)). The GSR and special reader positions may provide fee remissions in addition to the standard pay. In some cases, GSR can also qualify for non-resident tuition remission.

If you are seeking employment, a good first step is to add the jobs (GSR and TA) slack channels. You can also inquire directly with faculty for GSR positions or email Roxy Naranjo. If you are interested in being a Teaching Assistant and are an international student, make sure that you have taken the Test of Oral Proficiency (TOP) test. For more information visit: https://wp.ucla.edu/test-of-oral-proficiency-top-exam-overview/

In addition, consider contacting the Career Center (http://www.career.ucla.edu/) for work study opportunities, as well as the Financial Aid Office (http://www.financialaid.ucla.edu/.)

Blue Petition

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. For example, a request to substitute a required course for another, requires a blue petition. The petition will need to be signed by your advisor and Department Chair. The petition is available on Slack:
https://ucla-biostat.slack.com/archives/C01B4JFJRAB/p1610071274001800
Blue petitions should be filed prior to any variation from stated policy, not after, discussed with academic advisor and secure their signature on the form and sent to Roxy via email or delivered to her office. Check with Roxy Naranjo to confirm you are following the correct procedures.

List of All Biostatistics Courses

Below is a list of all biostatistics courses that are offered. However, please note that many courses are not offered each year. Course descriptions and further details can be found at https://registrar.ucla.edu/academics/course-descriptions

200A. Methods in Biostatistics A

Units: 4.0

200B. Methods in Biostatistics B

Units: 4.0

200C. Methods in Biostatistics C

Units: 4.0

201A. Introduction to Biostatistics

Units: 4.0

201B. Introduction to Biostatistics

Units: 4.0

202A. Mathematical Statistics A

Units: 4.0

202B. Mathematical Statistics B

Units: 4.0

202C. Theory of Bayesian Statistics

Units: 4.0

203A. Introduction to Data Management and Statistical Computing

Units: 4.0

203B. Introduction to Data Science in R

Units: 4.0

203C. Introduction to Data Science in Python

Units: 4.0

M208. Introduction to Demographic Methods

Units: 4.0

210. Statistical Methods for Categorical Data

Units: 4.0

211A. Topics in Applied Regression

Units: 4.0

211B. Topics in Applied Regression

Units: 4.0

212A. Statistical Learning A

Units: 4.0

212B. Statistical Learning B

Units: 4.0

213. Introduction to Computational Methods in Biostatistics

Units: 4.0

214. Finite Population Sampling

Units: 4.0

M215. Survival Analysis

Units: 4.0

216. Mathematical Methods for Biostatistics

Units: 4.0

219. Special Topics: Supplemental Topics

Units: 4.0

230. Statistical Graphics

Units: 4.0

231. Statistical Power and Sample Size Methods for Health Research

Units: 4.0

M232. Statistical Analysis of Incomplete Data

Units: 4.0

233. Statistical Issues in Global Health

Units: 4.0

M234. Applied Bayesian Inference

Units: 4.0

M235. Causal Inference

Units: 4.0

M236. Longitudinal Data

Units: 4.0

M237. Applied Genetic Modeling

Units: 4.0

M238. Methodology of Clinical Trials

Units: 4.0

M239. Mathematical and Statistical Phylogenetics

Units: 4.0

241. Spatial Modeling and Data Analysis for Health Sciences

Units: 4.0

244. Master's Seminar and Research Resources for Graduating Biostatistics MS Students

Units: 4.0

245. Advanced Seminar: Biostatistics

Units: 2.0

246. Doctoral Students Seminar

Units: 2.0

250A. Linear Statistical Models

Units: 4.0

250B. Linear Statistical Models

Units: 4.0

250C. Multivariate Biostatistics

Units: 4.0

255A. Advanced Probability and Statistics

Units: 4.0

255B. Advanced Probability and Statistics

Units: 4.0

M257. Computational Methods for Biostatistical Research

Units: 4.0

270. Stochastic Processes

Units: 4.0

M272. Theoretical Genetic Modeling

Units: 4.0

273. Machine Learning

Units: 4.0

274. Topics in Statistical Machine Learning

Units: 4.0

275. Advanced Survival Analysis

Units: 4.0

276. Inferential Techniques that Use Simulation

Units: 4.0

277. Robustness and Modern Nonparametrics

Units: 4.0

279. Optimal Design Theory and Application

Units: 4.0

M280. Statistical Computing

Units: 4.0

285. Advanced Topics: Recent Developments

Units: 4.0

296. Seminar: Research Topics in Biostatistics

Units: 1.0 to 4.0

400. Field Studies in Biostatistics

Units: 4.0

402A. Principles of Biostatistical Consulting

Units: 2.0

402B. Biostatistical Consulting

Units: 4.0

M403B. Computer Management and Analysis of Health Data Using SAS

Units: 4.0

406. Applied Multivariate Biostatistics

Units: 4.0

409. Doctoral Statistical Consulting Seminar

Units: 2.0

410. Statistical Methods in Clinical Trials

Units: 4.0

411. Analysis of Correlated Data

Units: 4.0

413. Introduction to Pharmaceutical Statistics

Units: 4.0

414. Principles of Sampling

Units: 4.0

495. Teacher Preparation in Biostatistics

Units: 2.0

496. Teaching Biostatistics

Units: 2.0

595. Effective Integration of Biostatistical Concepts in Public Health Research

Units: 4.0

596. Directed Individual Study or Research

Units: 2.0 to 8.0

597. Preparation for Master's Comprehensive or Doctoral Qualifying Examinations

Units: 2.0 to 12.0

599. Doctoral Dissertation Research

Units: 2.0 to 12.0

Other Courses of Interest

Some courses from other UCLA departments such as the Department of Statistics may qualify as a Biostatistics elective. You will need approval from your academic advisor and Department Chair (via blue petition). Approval should be obtained before enrolling in the course, not after. Listed below are some possible courses:

Statistics 218   Statistical Analysis of Networks (4)
Statistics M232A   Statistical Modeling and Learning in Vision and Science (4)
Statistics 242   Multivariate Analysis with Latent Variables (4)
Statistics M243   Logic, Causation, and Probability (4)
Statistics C261   Introduction to Pattern Recognition and Machine Learning (4)
Statistics 271   Probabilistic Models of Visual Cortex (4)