



GRADUATE GROUP IN
BIOSTATISTICS

Handbook for Graduate Students

2020 - 2021

UC DAVIS
UNIVERSITY OF CALIFORNIA

Welcome to the BIOSTATISTICS GRADUATE GROUP at UC Davis!

This Handbook helps you to navigate through your studies at Davis. It summarizes the most important guidelines and issues, as well as listing the degree requirements.

CONTENTS

Introduction: p3

Master's Degree Requirements: p 6

Ph.D. Degree Requirements: p11

Special Regulations: p19

List of Courses: p22

FACULTY of the Graduate Group in Biostatistics: p22

Math Sciences Building floor plan: p27

Resources and Other Information: p29

Academic Calendar: p30

Fees and Remissions: p31

INTRODUCTION

ABOUT US

We are an interdisciplinary graduate group drawing together faculty and research from two colleges and three schools. Founded in 2002, the Graduate Group in Biostatistics is housed in the Department of Statistics, and consists of 32 faculty members from the following departments across campus: Statistics, Public Health Sciences, Population Health and Reproduction, Psychology, Computer Science, Nutrition, Plant Sciences, Molecular and Cellular Biology, Pediatrics, the Genome Center and the Graduate School of Management. We have approximately 33 graduate students in our Ph.D. and M.S. programs, many of whom are funded as researchers or teaching assistants, with office space within the Statistics department.

WHAT IS BIOSTATISTICS?

Biostatistics is a field of science that uses quantitative methods to study life sciences related problems that arise in a broad array of fields. Biostatistics provides stochastic models and methods, algorithms and graphical tools for the analysis of data from genetics, bioinformatics, and the medical, biological, agricultural and environmental health sciences. This includes methodology and models for data at the subcellular level (Genetics, Genomics, Proteomics and Bioinformatics), cellular level (Cancer Models, Neuron Models, Cell Distribution, Cell Kinetics and Survival), tissue/organ level (Pharmacokinetic and Toxicological Modeling, Imaging Techniques), individual level (Clinical Studies, Life History, Growth, Aging and Survival), and the population level (Biomathematical Modeling in Ecology, Epidemiological, Demographic and Public Health Studies). Core problems and methodologies include Survival Analysis, Clinical Trials, Longitudinal Studies, Generalized Linear Models, Dose-Response and Estimating Equations, Mixed and Random Effects Modeling, and the Analysis of Molecular Sequence Data as well as the statistical methodology of Bioinformatics.

A special feature of our graduate program is that it emphasizes biostatistical modeling and inference in a wide variety of fields, including bioinformatics, the biological sciences and veterinary medicine, in addition to the more traditional emphasis on applications in medicine, epidemiology and public health. This feature takes advantage of unique UC Davis strengths, including the unparalleled diversity of the UCD campus in the life sciences. Biostatistics group faculty are researchers with widely varying backgrounds, espousing a wide variety of methodological approaches.

The program in Biostatistics provides students with:

- Solid training in the biostatistical core disciplines and theory;
- State-of-the art knowledge and skills for biostatistical data analysis;
- Substantial exposure to the biological and epidemiological sciences;
- A strong background in theoretical modeling, statistical techniques and quantitative as well as computational methods.

The program prepares students for interdisciplinary careers ranging from bioinformatics, environmental toxicology, stochastic modeling in biology and medicine to clinical trials, drug development, epidemiological and medical statistics.

A unique feature of this program is that it emphasizes biostatistical modeling and inference in a wide variety of fields, including bioinformatics, the biological sciences and veterinary medicine, in addition to the more traditional emphasis on applications in medicine, epidemiology and public health. This feature takes advantage of unique UC Davis strengths, including the unparalleled diversity of the UCD campus in the life sciences. Biostatistics faculty at UCD cover the major biostatistics subspecialties, such as Survival Analysis, Longitudinal Data Analysis, Dose-Response, Diagnostic and Screening Tests. In addition, a broad array of other subfields is included in the faculty research interests, such as Curve Data and Functional Data Analysis, Interlaboratory Testing, Bayesian Modeling in Biostatistics, Statistical Modeling in Ecology, Nutrition, Biodemography, Nephrology, Psychiatry and Neurosciences, Statistical Genetics and Statistical Methods for Sequencing and Molecular Biology, Statistics in Health Care Research, Spatial Methods for Environmental and Epidemiological Data, and Random and Mixed Effects Models. These areas are well represented among Biostatistics faculty and this unique combination of features presents students with an unusually diverse choice of applications and applied research problems. Biostatistics group faculty are researchers with widely varying backgrounds, espousing a wide variety of methodological approaches.

The Biostatistics program at UC Davis is based on solid methodological and theoretical foundations and emphasizes high quality at all levels of instruction and research. Students receive strong training in the core Biostatistics disciplines, in the biological sciences and also in theoretical statistics. The faculty of the Biostatistics Group consists of recognized researchers and teachers who are committed to a distinguished program in graduate education and research.

ABOUT DAVIS

The University of California has ten campuses, of which Davis is the third largest. The campus started as an agricultural school (first admitting students in 1908) and later established the School of Veterinary Medicine. It became a general campus in 1959. Since that time, the campus has expanded to 35,400 (Fall 2014) students, with undergraduate and graduate programs in many fields, and the professional schools of law, management, medicine and veterinary medicine. Despite the size of the campus, it has retained many of the attributes of a small college, with an informal atmosphere and excellent student-faculty interaction.

The city of Davis has been called the most “energy-conscious” city in the United States. It is an interesting, forward-looking city of about 65,600 located in California’s Central Valley. It lies 15 miles west of Sacramento, the State capital, and 75 miles northeast of San Francisco. Davis residents can take advantage of the recreational opportunities of Lake Tahoe, Northern Sierra Nevada, Napa Valley, and the beaches of northern California.



The UC Davis Arboretum

BIOSTATISTICS DEGREE PROGRAMS:

THE MASTER'S PROGRAM IN BIOSTATISTICS

<http://biostat.ucdavis.edu/graduate-program/ms>

Degree Requirements approved by Graduate Council August 2020

ADMISSIONS REQUIREMENTS

An undergraduate major in mathematics or statistics is typical for Biostatistics graduate students, but is not required. However, because of the mathematical nature of some of the graduate coursework, students should be able to demonstrate good mathematical ability. Students should also demonstrate some exposure to courses in the life sciences (biological, environmental, medical and agricultural sciences). The minimal background for entrance into the master's program is: a bachelor's degree with a 3.0 overall grade-point average; one year of calculus; a course in linear algebra; facility with a programming language; and upper-division work in mathematics and/or statistics.

Applicants without this minimal background will not be considered for admission in the Graduate Group. Applicants must complete the online Office of Graduate Studies application, and provide three letters of recommendation; applicants whose native language or language of instruction is not English must achieve the minimum TOEFL or IELTS scores listed on the Office of Graduate Studies website. The program does not accept part-time students.

MASTER'S PLAN

This is a M.S. Plan II program which requires a comprehensive exam (no thesis). A minimum of 49 units is required (graduate and upper division), of which at least 18 must be graduate courses in the major field (according to university regulations). Not more than 9 units of research (299 or equivalent) may be used to satisfy the 18-unit requirement. Students who are underprepared for the required curriculum may elect to take STA 131A, B, or C, STA 106, STA 108, or similar courses within the first academic year of the MS program and must achieve a grade of at least a B in each course, but these units will not count toward the degree. This plan requires more units than the UC Davis minimum, which are: 36 units of graduate and upper division courses, of which at least 18 units must be graduate courses in the major field.

COURSE REQUIREMENTS (49 units)

Required courses (34 units):

STA 200 A, B, C (4 units each)* STA135 (4 units)
STA260 (3 units) BST290 (3x) (1 unit)
STA 243 (4 units)
STA 206, 207 (4 units each)**

The following courses can be used to substitute certain required courses:

STA 231AB for STA 200AB
STA232C for STA135
STA 232AB for STA 206-207
STA232C for STA135;
STA 141A for STA 243; A data analysis project conducted under BST299 (independent study) for STA260

Students desiring to replace a required course with an allowed substitute (see above) must first get pre-approval by their faculty advisor. If a required course for the M.S. program is substituted in this way, the substituting course cannot be used to simultaneously satisfy any other requirement.

Biostatistics core courses (8 units):

Two courses chosen from:

BST222 (Survival Analysis) (4 units)
BST223 (Generalized Linear Models) (4 units)
BST224 (Longitudinal Data Analysis) (4 units)
BST225 (Clinical Trials) (4 units)
BST226 (Statistical Methods in Bioinformatics) (4 units).

Electives (7 units):

Biostatistics and Methods electives (4 units):

One course with a substantial biostatistical data analysis component at the upper division or the graduate level. Possible courses include the following (although they may not simultaneously satisfy any other Biostatistics core courses requirement):

BST222 (4 units) STA237 A, B (4 units each)
BST223 (4 units) STA250 (4 units)
BST224 (4 units) STA251 (4 units)
BST225 (4 units) STA252 (4 units);
BST226 (4 units)
BST227 (4 units)

Life Sciences Elective (3 units):

One course selected from any upper division or graduate offering in biology, epidemiology, environmental, agricultural or medical sciences.

Further elective units at the upper division or graduate level may be taken in the following areas if a student wishes to do so for furthering his or her career objectives: (a) Statistics, (b) Fields of Biostatistical application (e.g., epidemiology, genetics).

SUMMARY

A minimum of 49 units is required; 42 units of core and 7 of elective coursework. A minimum course load is 12 units per academic quarter. Per UC regulations students cannot enroll in more than 12 units of graduate level courses or more than 16 units of combined undergraduate and graduate level courses per quarter.

COMMITTEES

ADMISSIONS COMMITTEE: once applications and relevant materials are submitted to the program, they are reviewed by the Admissions Committee, which consists of three to five faculty members appointed by the Chair of the Graduate Group. Once a decision has been made to admit or deny an applicant, the Admissions Committee chair forwards the committee's recommendation to the Dean of Graduate Studies for approval. Notification of admissions decisions will be sent by Graduate Studies. The priority application and fellowships deadline for entry in Fall of the next academic year is January 15; applications are accepted through May 15.

ADVISING COMMITTEE: Five faculty members are appointed by the Dean of Graduate Studies to the Committee of Advisers, chaired by the Master Graduate Adviser. Mentors for each student are chosen from this group and assist the students in the transition through the graduate program. The Master Graduate Adviser meets quarterly with each graduate student and assists graduate students in developing a study plan. In particular, the Master Graduate Adviser must approve all courses to be used to fulfill the requirements. Other members of the Committee of Advisers support the Master Graduate Adviser when needed. All students are expected to enroll in a minimum of 12 units per quarter, which may include a combination of required courses, electives, and research units (BST299).

COMPREHENSIVE EXAMINATION COMMITTEE: The Graduate Group Chair will appoint two permanent members to the M.S. comprehensive exam committee for two year terms. The third member, who will be the chair, is identified by the Master Graduate Adviser in consultation with the student. This committee will be in charge of administering the M.S. comprehensive exam and reporting the result to the chair of the GGB. The chair of the committee is responsible for guiding the student in preparation for the comprehensive exam.

ADVISING AND MENTORING

Five faculty members are appointed by the Dean of Graduate Studies to the Committee of Advisers, chaired by the Master Graduate Adviser. Mentors for each student are chosen from this group and assist the students in the transition through the graduate program. The Master Graduate Adviser assists graduate students in developing a study plan, and has signatory authority for all paperwork to be submitted to the Office of Graduate Studies. Other members of the Committee of Advisers support the Master Graduate Adviser when needed. The Mentoring Guidelines may be found online (<http://biostat.ucdavis.edu/pages/program/mentoring%20guidelines.pdf>).

ADVANCEMENT TO CANDIDACY

Plan II M.S. Candidates must file an advancement to candidacy form (<http://www.gradstudies.ucdavis.edu/forms>) prior to taking the M.S. comprehensive examination. Candidates must have taken at least half of the required coursework for their degree requirements (25 units) prior to advancing to candidacy. Students are expected to apply for advancement to candidacy by the end of the third quarter in the program, and then advance by the end of the 6th quarter. A completed form includes a list of courses the student will take to complete degree requirements. If changes must be made to the student's course plan after s/he has advanced to candidacy, the Master Graduate Adviser must recommend these changes to Graduate Studies. Students must have the Master Graduate Adviser sign the candidacy form before it can be submitted to Graduate Studies. If the candidacy is approved, the Office of Graduate Studies will send a copy to the program and the student.

If the Office of Graduate Studies determines that a student is not eligible for advancement, the program and the student will be told the reasons for the application's deferral. Some reasons for deferring an application include: grade point average below 3.0, outstanding "I" grades in required courses, or insufficient units.

COMPREHENSIVE EXAM

Students in the M.S. program must attempt the exam when nearly all coursework is complete, typically in the last quarter in the program. Every M.S. student needs to pass the comprehensive exam in a maximum of two attempts. If a student fails the first attempt, the second attempt must be done before the end of the next quarter; in particular, if the first attempt is made in Spring, the second attempt must be made over the summer. Failure to pass the comprehensive exam at the second attempt will result in a recommendation to the Dean of Graduate Studies for disqualification of the student in the graduate program.

The M.S. Comprehensive Examination consists of a written technical report and an oral defense on a scientific project involving the application of Biostatistical theory and methods. This project should be well written and should have the potential to be publishable in a scientific journal. The chair of the committee will provide the student with a scientific project involving real-life study design and/or data analysis. The student will have at most four weeks to complete the project and write the written technical report. The final written report should be submitted to the comprehensive exam committee at least one week prior to the predetermined exam date. The exam committee will schedule an oral defense with the candidate in which the candidate presents the project and answers questions about the work. After this oral defense, the committee will make a decision on whether to pass the candidate. Each student will receive a written evaluation on the performance on the examination, which will be discussed with the Biostatistics Master Graduate Adviser.

As an alternative to satisfy the MS comprehensive examination requirement, students who pass the PhD preliminary written examination (see the PhD degree requirements, section 8.a for details) at the master's level (a threshold set by the preliminary written examination committee) will meet this requirement. Any attempt to pass the PhD preliminary written examination by a MS student will be counted as a first attempt to pass the MS comprehensive exam at the MS level and also the PhD preliminary written examination at the PhD level. Failure at the PhD level counts as a failed first attempt of the PhD preliminary written examination, and failure at the MS level as a failed first attempt at the MS comprehensive exam. Any graduate student has at most two attempts at this exam, regardless of the program the student is enrolled in.

NORMATIVE TIME TO DEGREE

The Normative Time to Degree for the Biostatistics M.S. program is six quarters (two years), although well-prepared students with sufficient statistical/biostatistical background prior to enrollment in the Graduate Group may find it possible to finish the program in five quarters.

BIOSTATISTICS DEGREE PROGRAMS:

THE Ph.D. PROGRAM IN BIOSTATISTICS

<http://biostat.ucdavis.edu/graduate-program/phd>

Degree Requirements approved by Graduate Council August 2020

ADMISSION REQUIREMENTS

An undergraduate major in mathematics or statistics is typical for Biostatistics graduate students, but is not required. However, because of the mathematical nature of some of the graduate coursework, students should be able to demonstrate good mathematical ability. Students should also demonstrate some exposure to courses in the life sciences (biological, environmental, medical and agricultural sciences).

The minimal background for entrance into the Ph.D. program is: a bachelor's degree with a 3.0 overall grade-point average; one year of calculus; a course in linear algebra; familiarity with a programming language; and upper-division work in mathematics and/or statistics.

Applicants without this minimal background will not be considered for admission in the Graduate Group. Applicants must complete the online Office of Graduate Studies application, and provide three letters of recommendation and GRE scores taken within the last 5 years; applicants whose native language or language of instruction is not English must achieve the minimum TOEFL or IELTS scores listed on the Office of Graduate Studies website. The program does not accept part-time students.

Prerequisites

In addition, applicants are expected to have the equivalent of the following UC Davis courses:

MAT25 and MAT125A and MAT167

Deficiencies

Course work deficiencies should be made up by the end of the first academic year following initial enrollment by earning a letter grade of "B" or better.

DISSERTATION PLAN

This is a Plan C program which specifies a three member (minimum) dissertation/final examination committee, a final oral examination, and no exit seminar.

COURSE REQUIREMENTS (58 units)

Required Statistics courses (39 units):

STA231 A, B, C (4 units each)	STA260 (3 units)
STA232 A, B, C (4 units each)	BST290 (1 unit) for six quarters
STA243 (4 units)	STA390 (2 units)

Biostatistics Core Courses (12 units):

BST222 (4 units)
BST223 (4 units)
BST224 (4 units)

Electives (7 units)

Biostatistics or Methods Electives (4 units):

One course from BST225 (Clinical Trials), BST226 (Statistical Methods for Bioinformatics), BST252 (Advanced Topics in Biostatistics), BST 227, STA250, STA251, STA237 AB, STA235 AB.

Life Sciences Courses Electives (3 units):

One course at the upper division or the graduate level in Biology or Life sciences. This course should be approved by the graduate advisor. The intention is to provide a base of knowledge in molecular, cellular, organismal, and population biology, epidemiology or environmental sciences. The students are strongly encouraged to take more courses in Biology, Life Sciences or Environmental Sciences that are relevant to their research. Selection of such courses should be made in consultation with the thesis adviser.

SUMMARY

A minimum of 58 units is required; 51 units of core and 7 of elective coursework. All students are expected to enroll in a minimum of 12 units per academic quarter, which may include a combination of required courses, electives, and research units (BST 299).

SPECIAL REQUIREMENTS

Biostatistics Practicum

Students will complete a practicum in the form of an interdisciplinary applied data analysis project. They will work in collaboration with any UC Davis faculty researcher (not required to be a member of the Graduate Group) who conducts studies or experiments which generate data in the medical, biological, veterinary medical, epidemiological, agricultural or environmental sciences, and who will serve as a mentor. The practicum will last a minimum of six weeks sometime before completion of the dissertation and will involve the analysis of original data. The student will prepare or substantially contribute to a project report. The practicum may be conducted as part of employment as a Graduate Student Researcher or as part of the dissertation research. A report based on an internship of a duration of at least six weeks at a facility, government health office, institute or company outside of UC Davis focusing on biological or medical research can also be used to satisfy this requirement. In this case the mentor will reside at the institution where the internship is carried out.

COMMITTEES

Admissions Committee: once applications and relevant materials are submitted to the program they are reviewed by the Admissions Committee, which consists of three to five faculty members appointed by the Chair of the Graduate Group. Once a decision has been made to admit or deny an applicant, the Admissions Committee chair forwards the committee's recommendation to the Dean of Graduate Studies for approval. Notification of admissions will be sent by Graduate Studies. The application and fellowships deadline is January 15 for admittance to the following fall quarter.

Advising Committee: Five faculty members are appointed by the Dean of Graduate Studies to the Committee of Advisers, chaired by the Master Graduate Adviser. Mentors for each student are chosen from this group and assist the students in the transition through the graduate program. The Master Graduate Adviser meets quarterly with each graduate student and assists graduate students in developing a study plan. In particular, the Master Graduate Adviser must approve all courses to be used to fulfill the requirements. Other members of the Committee of Advisers support the Primary Graduate Adviser when needed. All students are expected to enroll in a minimum of 12 units per quarter, which may include a combination of required courses, electives, and research units (BST299).

Qualifying Examination Committee: the examining committee consists of five members, at least three but no more than four of which are members of the GGB. Members will be appointed in accordance with the policies of the Graduate Council and Office of Graduate Studies at the recommendation of the Graduate Adviser who consults with the student prior to making the recommendation. The Major Professor (if already identified) is not eligible to serve on the QE committee. Conversely, faculty serving on the QE committee are ordinarily ineligible to serve as the Major Professor.

Dissertation Committee: the student, in consultation with their Major Professor, nominates three faculty to serve on the Dissertation Committee, one of which is the Major Professor who serves as Chair of the committee. These nominations are submitted to the Office of Graduate Studies for formal appointment in accordance with Graduate Council Policy (DDB 80. Graduate Council B.1.).

ADVISING AND MENTORING

Four to five faculty members are appointed by the Chair of the Graduate Group to the Committee of Advisers, chaired by the Master Graduate Adviser. The Master Graduate Adviser assists graduate students in developing a study plan, and has signatory authority for all paperwork to be submitted to the Office of Graduate Studies. Other members of the Committee of Advisers support the Master Graduate Adviser when needed. A Ph.D. student will select an area of specialization and will choose a dissertation adviser (Major Professor) from the Graduate Group in Biostatistics faculty working in that area, usually in the second or third year of study after passing the Ph.D. preliminary written examination. The Master Graduate Adviser, in consultation with the Committee of Advisors, assists students with identifying a major professor and ensures that each student finds his/her major professor in the area of student's research interest. The Major Professor would be qualified to guide the student during the student's dissertation research in a specialized area of research. In addition, the Major Professor may serve as an informal advisor for the student in developing update study plans deemed necessary for dissertation research. The Mentoring Guidelines may be found online at: (<http://biostat.ucdavis.edu/pages/program/mentoring%20guidelines.pdf>).

ADVANCEMENT TO CANDIDACY

The student is eligible for advancement to Candidacy for the Ph.D. degree upon completion of all course requirements and after passing the Ph.D. Qualifying Examination, usually within two to three quarters of passing the Ph.D. Preliminary Written Examination. For well-prepared students, with sufficient statistical/biostatistical background prior to enrollment in

the Graduate Group, they are expected to advance to candidacy by the end of the sixth quarter in the program. Otherwise, students are expected to advance to candidacy by the end of the ninth quarter in the program. Students must file the appropriate paperwork with the Office of Graduate Studies and pay the candidacy fee in order to be officially promoted to Ph.D. Candidacy.

QUALIFYING EXAMINATION & DISSERTATION REQUIREMENTS

Preliminary Written Examination

The Ph.D. Preliminary Written Examination will be given at fixed times, typically at the beginning of each Spring Quarter, with 2 months notification in advance before the written examination will be offered. The exam has two parts: a theory component based on STA 231A and 231B and a biostatistics component based on BST 222 and BST 223. The exam components may be taken at separate times. The duration of each part is about 3-4 hours. Students in the PhD program must take the theory component in the Spring Quarter immediately after they complete the STA 231A and STA 231B course series and the biostatistics component after they complete the BST 222 and BST 223 core course series. A well-prepared student will take this exam in the Spring Quarter during the first year of the program. Otherwise, they are expected to take the exam during the second year of the program in the Spring Quarter. If a student does not attempt the examination at the first time they are eligible to take the exam, it will be recorded as a failure. Every PhD student needs to pass each part of the examination within a maximum of two attempts. In case of failure at the first attempt, the second attempt must take place at the next time the examination is offered (usually the retake is given in the Fall quarter of the third year), and if a student does not attempt the exam at that time, it will be counted as a second failure. Failure to pass the examination on the second attempt will result in a recommendation to the Dean of Graduate Studies for disqualification of the student from the PhD program.

The PhD Preliminary Written Examination committees in charge may be different for each part of the exam. Pass or fail is determined separately by the exam committees for the statistical theory part and the biostatistics part of the exam. The chair of the GGB will appoint an exam committee for two year terms that will be responsible for preparing, administering and grading the examination. This committee will make the final decision on each student and forward its recommendation to the chair of the GGB.

Ph.D. Qualifying Exam

The Ph.D. Qualifying Examination is an oral exam. The exam will be attempted as soon as the Ph.D. Preliminary Written Examination has been passed and all required coursework for the Ph.D. degree in Biostatistics

has been completed. In accordance with university rules, students are requested to take their qualifying examination, within three quarters of passing the Ph.D. Preliminary Written Examination, but no later than the end of the third year (9th quarter) to remain eligible for academic appointments such as Graduate Student Researcher (GSR) or Teaching Assistant (TA). The Master Graduate Adviser must submit the Application for the Qualifying Exam to Graduate Studies four weeks prior to the exam date; exams taken before receiving Office of Graduate Studies approval, may be deemed null and void. Students must be registered during the quarters in which they take any portion of their Qualifying Examination. To be eligible for the Qualifying Examination, the student must have:

- A "B" average in all work done in graduate standing;
- Satisfied all departmental or group requirements; and
- Removed all academic deficiencies

The preparation for the exam will be done by working closely with a faculty mentor through BST 299 (independent study) who is a regular member of the GGB. The exam committee consists of five faculty members, at least three but no more than four of which are members of the GGB. The Major Professor is not eligible to serve on the PhD Qualifying Examination committee. The Ph.D. Qualifying Examination examines a student on the breadth and depth of knowledge expected from the coursework taken, and a special research topic in Biostatistics specified by the major professor in consultation with the exam committee. The primary purpose of the QE is to validate that the student is academically qualified to conceptualize a research topic, undertake scholarly research and successfully produce the dissertation required for a doctoral degree. A 45 minute presentation on the specified research topic for the dissertation given by the student is followed by the qualifying examination session of 2-3 hours long, which covers questions on the special research topic presented as well as coursework in general. The examining committee will be appointed by Graduate Council at the recommendation of the Master Graduate Adviser who consults with the student prior to making the recommendation.

Graduate Studies guidelines for Ph.D. Qualifying Examinations apply. A student who passes the Ph.D. Qualifying Examination is eligible for Advancement to Candidacy for the Ph.D. degree. Title and abstract of the Ph.D. Qualifying Examination presentation will be distributed to all faculty and students of the Graduate Group in Biostatistics, who are invited to attend the 45-minute presentation portion prior to the qualifying examination session. The qualifying examination portion is a closed session between the student and the committee only. The student must file the appropriate paperwork with the Office of Graduate Studies and pay the candidacy fee

to be promoted to Candidacy for the Ph.D. degree.

Qualifying Exam: Outcomes

A committee, having reached a unanimous decision, shall inform the student of its decision as “Pass” (no conditions may be appended to this decision), “Not Pass” (the Chair’s report should specify whether the student is required to retake all or part of the exam, list any additional requirements, and state the exact timeline for completion of requirements to achieve a “Pass”) or “Fail”. If a unanimous decision takes the form of “Not Pass” or “Fail”, the Chair of the QE committee must include in its report a specific statement, agreed to by all members of the committee, explaining its decision and must inform the student of its decision. Having received a “Not Pass”, the student may attempt the QE one additional time or fulfill the committee’s requirements for “Pass”. After a second exam, a vote of “Not Pass” is unacceptable; only “Pass” or “Fail” is recognized. Only one retake of the QE is allowed. A student who fails the QE on the second attempt will be recommended to the Dean of Graduate Studies for disqualification from the program.

The Dissertation

The doctoral dissertation is an essential part of the Ph.D. program. A topic will be selected by the student, under the advice and guidance of a Major Professor (thesis adviser) and a Dissertation Committee chaired by the Major Professor. Students are encouraged to begin some research activity as early as possible during the second year of their graduate studies. The dissertation must contain an original contribution of publishable quality to the knowledge of Biostatistics that may expand the theory or methodology of Biostatistics, or expand or modify Biostatistical methods to solve a critical problem in applied disciplines.

Acceptance of the dissertation by three designated members of the dissertation committee follows Graduate Studies guidelines (Plan C). The dissertation must be completed and submitted to the dissertation committee prior to taking the final examination described in Section 8 (e).

Final Examination

The entire dissertation committee will conduct a final oral examination, which will deal primarily with questions arising out of the relationship of the dissertation to the field of Biostatistics. The final examination will be conducted in two parts. The first part consists of a one hour presentation by the candidate followed by a brief period of questions pertaining to the presentation; this part of the examination is open to the public. The second part of the examination will immediately follow the first part; this is a closed session between the student and the committee and will consist of a period of questioning by the committee members. Title and abstract of

the oral presentation will be distributed to all faculty and students of GGB, who are invited to attend the presentation portion of the examination.

NORMATIVE TIME TO DEGREE

The normative time to degree is five to six years.

TYPICAL TIME LINE AND SAMPLE STUDY PLANS

Every full-time student at UC Davis is required to take 12 units of course-work per quarter. In addition to the coursework outlined below, students will take Biostatistics 290 and generally will take additional electives later on, in consultation with their Major Professor and/or the Master Graduate Advisor.

The following track will be a typical program for a well-prepared student seeking a Ph.D. degree.

Year 1

Fall	Winter	Spring
STA 231A	STA 231B	STA 231C
STA 232A	STA 232B	STA 232C
BST 222	BST 223	BST 224
STA 390	BST 290	STA 260
		PhD Preliminary Written Exam

Year 2

Fall	Winter	Spring
STA 243	STA 226	Dissertation Research
Elective	Elective	
Elective	Elective	
	BST 290	
	Ph.D. Qualifying Exam	

Years 3-6: Complete requirements for the Ph.D. degree, including Dissertation and Defense

SOURCES OF FUNDING

The main sources of funding include TA-ships and Graduate Student Researcher (GSR) positions. Also, students are strongly encouraged to apply for intramural or extramural fellowships.

PELP, IN ABSENTIA & FILING FEE STATUS

Information about PELP (Planned Educational Leave, In Absentia (reduced-fees when researching out of state), and Filing Fee status can be found in the Graduate Student Guide: <http://www.gradstudies.ucdavis.edu/publications>.

LEAVING THE PROGRAM PRIOR TO COMPLETION OF THE PH.D. REQUIREMENTS

Should a student leave the program prior to completing the requirements for the Ph.D., they may still be eligible to receive the Master's if they have fulfilled all the requirements (see Master's section). Students can use the Change of Degree Objective form available from the Registrar's Office: <http://registrar.ucdavis.edu/PDFFiles/D065PetitionForChangeOfGraduateMajor.pdf>

SPECIAL REGULATIONS

For a list of available forms and policies, please visit:

<http://biostat.ucdavis.edu/graduate-program/forms-policies.html>

DOUBLE-MAJOR PROGRAM

Current UC Davis graduate students can apply to enter the M.S. program in Statistics as a Double Major during any quarter. We do not require a separate application, however you will need to complete a Double Major Application (see <http://www.stat.ucdavis.edu/grad/forms-policies> for the form). This form must be signed by the graduate adviser of your present program, as well as either the graduate adviser for Statistics. This form is then submitted to the graduate program coordinator. There will, however, usually be no financial support available for such students.

Under a Graduate Council ruling, a student in a double major program may transfer up to 12 units from one program to another with the approval of the graduate adviser and the Dean of Graduate Studies. The student must spend a minimum of two quarters in regular graduate standing in the Statistics master's program to meet the residency requirements of the Graduate Division.

TRANSFER CREDIT

Master's students may request to transfer 6 units of required credit from an accredited non-UC campus, up to one-half of the quarter-units from another UC campus, or 12 units from UC Davis Extension to their graduate transcript. Only graduate and upper division coursework may be transferred; lower division coursework is not transferrable. For doctoral students, some work taken elsewhere may be used to satisfy certain degree requirements with the consent of the Graduate Adviser and the Dean of Graduate Studies.

FROM UNDERGRADUATE: Up to 6 units of graduate work (that is, only 200-level courses) taken by an undergraduate student may be credited toward their graduate degree program. This does not apply if units were used to satisfy any requirements for the bachelor's degree

RESIDENCE REQUIREMENTS

The minimum residence requirement at the University of California is three quarters for the Master's degree, nine quarters for the degree of Juris Doctor, and six quarters for the degrees of Doctor of Philosophy and Doctor of Engineering, as is prescribed by UC Senate Regulations. Please note that per our degree requirements students must be enrolled full-time in a minimum 12 units each quarter.

REPEAT COURSES AND INCOMPLETE GRADE ASSIGNMENT

Any graduate student may, with the consent of the graduate adviser and the Dean of the Graduate Studies, repeat a course in which a grade of C, D, F, or Unsatisfactory was assigned, up to a maximum of nine units. Any repeated course, except for courses offered only on a S/U basis, must be taken for a letter grade.

The grade of Incomplete ("I") must be removed before the end of the third succeeding quarter of academic residence. In the event a student accumulates more than 8 units of Incomplete, the student shall be subject to disqualification.

A statistics graduate student will be prohibited from taking a qualifying examination if 8 units of "I" appear on the scholastic record or if any of the "I" grades were received for courses required for the master's or Ph.D. degrees.



MINIMUM GPA REQUIREMENT

Graduate students must at all times maintain a cumulative and per quarter GPA of 3.0 or higher to remain in good standing. They also need to make normal progress towards their degree. The sample study plans provided above serve as guidelines for normal progress.

GUIDELINES FOR Ph.D. QUALIFYING EXAMINATIONS

To be eligible for examination, the student must have satisfied all program requirements (course work, Ph.D. Written Exam), have removed all deficiencies, and must have at least a 3.0 GPA in all work undertaken in graduate standing. Students must be registered the quarter in which they take any portion of their Qualifying Examination.

A student may not take the examination prior to approval from Graduate Studies. If the examination is held prior to approval and the committee is deemed unsuitable by the Dean of Graduate Studies after the fact, the examination can be considered null and void. It takes approximately four weeks for Graduate Studies to process the application and to notify the student and the chair of the committee of the approval. The application should be submitted through the graduate adviser early enough in advance of the examination date. For further details, consult Graduate Studies regulations on Ph.D. Qualifying Examinations.

ANNUAL EVALUATION OF PROGRESS

The normative time for the Ph.D. in the Biostatistics program is 5 years. Incentives for timely progress toward completion for Ph.D. students will be instituted by offering support primarily for those students who are making good progress, by encouraging the recruitment of “fast track” Plan 2 students (described in Sample Plans in the Appendix), by efficient advising and mentoring of students, and by annual offerings of required courses. Graduate Council policy requires the Graduate Adviser to file an annual, written evaluation of the academic progress of each graduate student. On the basis of this evaluation as well as GPA, each student who is rated as making unsatisfactory progress receives a warning letter from Graduate Studies indicating specific conditions that must be met in order to continue in graduate status. If the conditions that lead to an unsatisfactory progress report or GPA below 3.0 are not corrected within a specified time, this may lead to termination of the graduate student status in the program. A satisfactory progress report does not necessarily imply that a student will ultimately succeed in completing a graduate program.

Ph.D. students must maintain the level as stipulated by Graduate Studies in all graduate and upper division course work to maintain satisfactory progress. For PhD students in the GGB, satisfactory progress consists of:

- GPA of 3.0 or better;
- advancement to candidacy filed within 2 quarters of becoming eligible to take the examination, within 2 years of entering the program for students with significant Statistics and Biostatistics background and within 3 years of entering the program for students with lesser background;
- taking all pre-qualifying exams as soon as eligibility is established, i.e., at the first offering after the coursework that is examined has been completed.
- passing the pre-qualifying exams.
- completion of all degree requirements, including successful defense of the dissertation and filing of the dissertation, within 3 years of advancing to candidacy and within 5 years of entering the PhD program.

STATISTICS COURSES

Lower Division Courses

10	Statistical Thinking (4)
12	Introduction to Discrete Probability (4)
13	Elementary Statistics (4)
13V	Elementary Statistics (Web Based) (4)
32	Basic Statistical Analysis Through Computers (3)
90X	Seminar (1-2)
98	Directed Study (1-5)
99	Special Study for Undergraduates (1-5)

Upper Division Courses

100	Applied Statistics for Biological Sciences (4)
102	Introduction to Probability Modeling and Statistical Inference (4)
103	Applied Statistics for Business and Economics (4)
104	Applied Statistical Methods: Nonparametric Statistics (4)
106	Applied Statistical Methods: Analysis of Variance (4)
108	Applied Statistical Methods: Regression Analysis (4)
120	Probability and Random Variables for Engineers (4)
130A- 130B	Mathematical Statistics: A Brief Course (4, 4)
131A	Introduction to Probability Theory (4)
131B- 131C	Introduction to Mathematical Statistics (4, 4)
133	Mathematical Statistics for Economists (4)
135	Multivariate Data Analysis (4)
137	Applied Time Series Analysis (4)
138	Analysis of Categorical Data (4)
141A-141B-141C	Statistical Computing (4, 4, 4)
142	Reliability (4)
144	Sampling Theory of Surveys (4)
145	Bayesian Statistical Inference (4)
190X	Seminar (1-2)
192	Internship in Statistics (1-12)
194H / 194	A-B Special Studies for Honors Students (4, 4)
198	Directed Group Study (1-5)
199	Special Study for Advanced Undergraduates (1-5)

Graduate Level Courses

200A	Probability Theory (4)
200B-200C	Mathematical Statistics (4, 4)
205	Statistical Methods for Research (4)
206	Statistical Methods for Research I (4)
207	Statistical Methods for Research II (4)
208	Machine Learning (4)
209	Optimization for Big Data Analytics (4)
222*	Biostatistics: Survival Analysis (4)
223*	Biostatistics: Generalized Linear Models (4)
224*	Analysis of Longitudinal Data (4)
225	Clinical Trials (4)
226	Statistical Methodology for Bioinformatics (4)
231A- 231B- 231C	Mathematical Statistics (4, 4, 4)
232A- 232B- 232C	Applied Statistics (4, 4, 4)
233	Design of Experiments (3)
235A- 235B- 235C**	Probability Theory (3,3,3)
237A- 237B	Time Series Analysis (4, 4)
238	Theory of Multivariate Analysis
240A- 240B	Nonparametric Statistics (4, 4)
241	Asymptotic Theory of Statistics (4)
242	Statistical Programming (4)
243	Computational Statistics (4)
250	Topics in Applied and Computational Statistics (4)
251	Topics in Statistical Methods and Models (4)
252*	Advanced Topics in Biostatistics
260	Statistical Practice and Data Analysis
280	Orientation to Statistical Research (2)
290*	Seminar in Statistics (1)
298*	Group Study (1-5)
299*	Special Study for Graduate Students (1-12)
299D*	Dissertation Research (1-12)
390	Methods of Teaching Statistics (2)

* course jointly listed with Biostatistics

** course jointly listed with Mathematics

LIFE SCIENCE COURSES

Agricultural Sciences

- ANG 107 Genetics & Animal Breeding (4)
- ASE 105 Concepts in Pest Management (3)
- ASE 107 Small Fruit Production (2)
- ASE 110ABC Crop Production and Management (3,3,4)
- ASE 112 Forage Crop Ecology (3)
- ASE 150 Cropping Systems of the World (4)
- AVS 100 Avian Biology (3)
- ENH 102 Physiological Principles in Environmental Horticulture (4)

Biological and Environmental Sciences

- BIS 101 Genes and Gene Expression (4)
- BIS 102 Structure and Function of Biomolecules (3)
- BIS 103 Bioenergetics and Metabolism (3)
- ECS 124 Theory and Practice of Bioinformatics (4)
- ENT 100 General Entomology (3)
- ENT 102 Insect Physiology (4)
- EST 100 General Ecology (4)
- EST 110 Principles of Environmental Science (4)
- EST 121 Population Ecology (4)
- EVE 100 Introduction to Evolution (4)
- EVE 101 Introduction to Ecology (4)
- EVE 102 Population and Quantitative Genetics (4)
- EVE 103 Phylogeny and Macroevolution (3)
- EVE 117 Plant Ecology (4)
- MCB 150 Embryology (4)
- FST 104 Food Microbiology (3)
- NPB 100 Neurobiology (4)
- NPB 101 Systemic Physiology (5)
- NPB 102 Animal Behavior (3)
- NPB 112 Neuroscience (3)
- NPB 113 Cardiovascular, Respiratory, and Renal Physiology (4)
- NPB 114 Gastrointestinal Physiology (3)
- NPB 117 Avian Physiology (3)
- NPB 121 Physiology of Reproduction (3)
- NPB 125 Comparative Physiology: Neurointegrative Mechanisms (3)
- NPB 126 Comparative Physiology: Sensory Systems (3)
- NPB 127 Comparative Physiology: Circulation (3)
- NPB 128 Comparative Physiology: Endocrinology (3)

- NPB 129 Comparative Physiology: Respiration (3)
- NPB 130 Physiology of the Endocrine Glands (4)
- NPB 140 Principles of Environmental Physiology (3)
- NUT 110 Principles of Nutrition (5)
- NUT 116AB Clinical Nutrition (3,3)
- NUT 118 Community Nutrition (4)
- PLB 105 Developmental Plant Anatomy (5)
- PLB 111 Plant Physiology (3)
- PLB 112 Plant Growth & Development (3)
- PLB 116 Plant Morphology & Evolution (5)
- PLB 143 Evolution of Crop Plants (4)
- PLB 152 Plant Genetics (4)
- PLB 154 Plant Breeding (4)
- PLB 175 Applied Plant Biology (4)

Epidemiology and Veterinary Medicine

- EPI 222 Epidemiological Modeling (3)
- EPI 223 Spatial Epidemiology (3)
- EPI 206 Epidemiologic Study Design (3)
- EPI 208 Analysis and Interpretation of Epidemiologic Data (3)
- EPI 220 Problems in Epidemiologic Study Designs (4)
- EPI 207 Advanced Study Design (3)
- EPI 210AB Analytic Epidemiology (3,3)
- EPI 270 Research Methods in Occupational Epidemiology (3)
- EST 126 Environmental and Occupational Epidemiology (4)
- VME 217 Evaluation & Diagnostic Tests (3)

other courses may count. Please talk to your advisor

FACULTY OF THE BIostatISTICS GRADUATE GROUP

SHARIF ALY,
Department of Population Health and
Reproduction, School of Veterinary
Medicine.
E-mail: saly@ucdavis.edu

JAVIER ARSUAGA,
Department of Molecular and Cellular
Biology.
E-mail: jarsuaga@ucdavis.edu

HEEJUNG BANG,
Department of Public Health Sciences.
E-mail: hbang@phs.ucdavis.edu

LAUREL BECKETT,
Department of Public Health Sciences.
E-mail: labeckett@ucdavis.edu

PRABIR BURMAN,
Department of Statistics.
E-mail: pburman@ucdavis.edu

HAO CHEN,
Department of Statistics,
E-mail: hxchen@ucdavis.edu

SHUAI CHEN,
Department of Public Health Sciences.
E-mail: shschen@ucdavis.edu

CHRISTIANA DRAKE,
Department of Statistics.
E-mail: cmdrake@ucdavis.edu

EMILIO FERRER,
Department of Psychology.
E-mail: eferrer@ucdavis.edu

DANIELLE HARVEY,
Department of Public Health Sciences.
E-mail: djharvey@ucdavis.edu

FUSHING HSIEH,
Department of Statistics.
E-mail: fhsieh@ucdavis.edu

ANA-MARIA IOSIF,
Department of Public Health Sciences.
Email: aiosif@ucdavis.edu

JIMING JIANG,
Department of Statistics.
E-mail: jimjiang@ucdavis.edu

PHILIP H. KASS,
Department of Population Health and
Reproduction, School of Veterinary
Medicine.
E-mail: phkass@ucdavis.edu

KYOUNGMI KIM,
Department of Public Health Sciences.
Email: kmkim@ucdavis.edu

PATRICE KOEHL
Department of Computer Science
E-mail: koehl@cs.ucdavis

THOMAS C.M. LEE,
Department of Statistics.
Email: tcmlee@ucdavis.edu

DIANA MIGLIORETTI,
Department of Public Health Sciences.
Email: dmiglioretti@ucdavis.edu

BRIAN MOORE,
Department of Evolution and Ecology.
E-mail: brianmoore@ucdavis.edu

HANS-GEORG MÜLLER,
Department of Statistics.
E-mail: hgmuller@ucdavis.edu

MIRIAM NUNO,
Department of Public Health Sciences.
Email: mnuno@ucdavis.edu

DEBASHIS PAUL,
Department of Statistics.
E-mail: debpaul@ucdavis.edu

JIE PENG,
Department of Statistics.
E-mail: jiepeng@ucdavis.edu

BRAD POLLOCK,
Department Public Health Sciences.
E-mail: bpollock@ucdavis.edu

LIHONG QI,
Department of Public Health Sciences.
Email: lhqi@ucdavis.edu

GERALD QUON,
Department of Molecular & Cellular
Biology.
Email: gquon@ucdavis.edu

BRUCE RANNALA
UC Davis Genome Center.
E-mail: brannala@ucdavis.edu

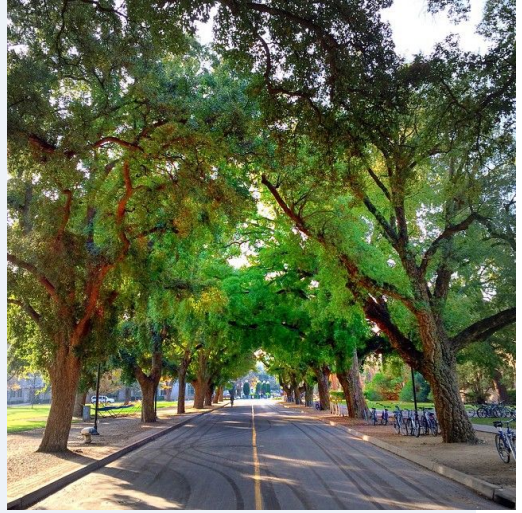
DAVID M. ROCKE,
Department of Public Health Sciences.
E-mail: dmrocke@ucdavis.edu

DANIEL RUNCIE,
Department of Plant Sciences
Email: deruncie@ucdavis.edu

DANIEL TANCREDI,
School of Medicine, Department of
Pediatrics.
Email: djtancredi@ucdavis.edu

CHIH-LING TSAI
Graduate School of Management
Email: cltsai@ucdavis.edu

JANE-LING WANG
Statistics
Email: janelwang@ucdavis.edu



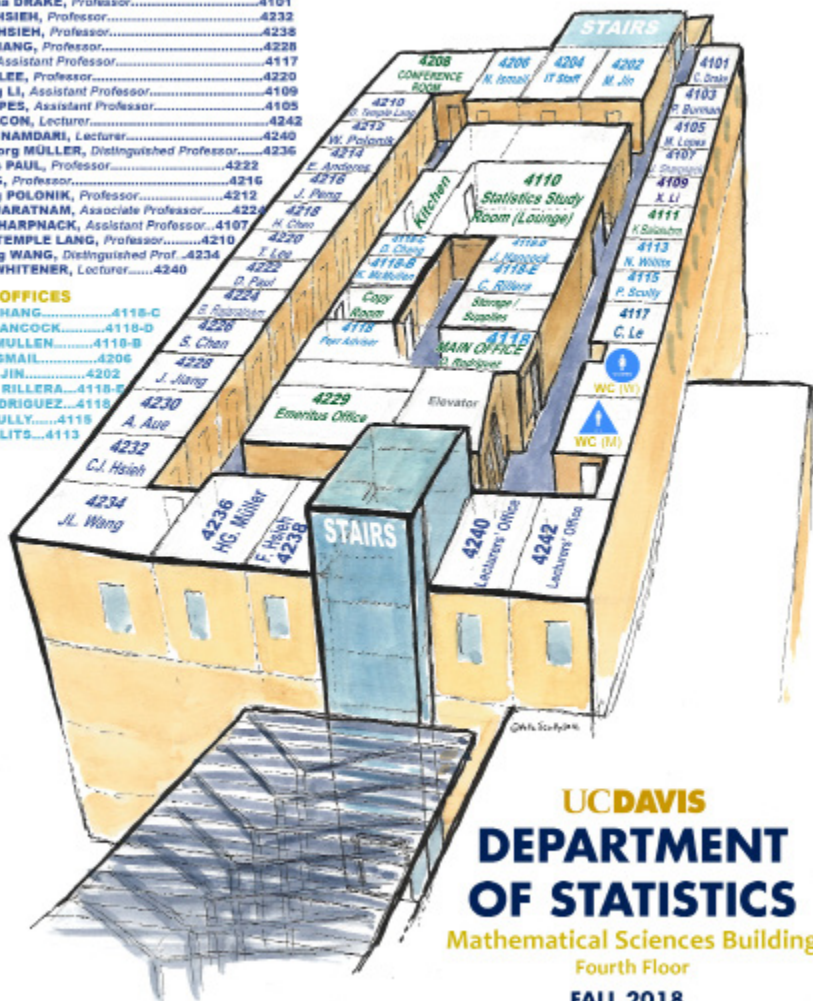
FLOOR PLAN OF MATH SCIENCES BUILDING, 4th FLOOR

FACULTY, INSTRUCTOR & POST-DOC OFFICES

Susan ALBER, Lecturer.....	4242
Ethan ANDERES, Associate Professor.....	4214
Alexander AUE, Professor & Chair.....	4230
Krishna BALASUBRAMANIAN, Assistant Professor.....	4111
Prabir BURMAN, Professor.....	4103
Shizhe CHEN, Assistant Professor.....	4226
Hao CHEN, Assistant Professor.....	4218
Christiana DRAKE, Professor.....	4101
Cho-Jui HSIEH, Professor.....	4232
Fushing HSIEH, Professor.....	4238
Jiming JIANG, Professor.....	4228
Can LE, Assistant Professor.....	4117
Thomas LEE, Professor.....	4220
Xiaodong LI, Assistant Professor.....	4109
Miles LOPES, Assistant Professor.....	4105
Erin MELCON, Lecturer.....	4242
Jamshid NANDARI, Lecturer.....	4240
Hans-Georg MÜLLER, Distinguished Professor.....	4236
Debashis PAUL, Professor.....	4222
Jie PENG, Professor.....	4216
Wolfgang POLONIK, Professor.....	4212
Bala RAJARATNAM, Associate Professor.....	4224
James SHARPBACK, Assistant Professor.....	4107
Duncan TEMPLE LANG, Professor.....	4210
Jane-Ling WANG, Distinguished Prof.....	4234
Joanna WHITENER, Lecturer.....	4240

STAFF OFFICES

Daniel CHANG.....	4115-C
Jillian HANCOCK.....	4115-D
Kim McMULLEN.....	4115-B
Mehad ISMAIL.....	4206
Michael JIN.....	4202
Cristeta RILLERA.....	4115-F
Olga RODRIGUEZ.....	4119
Pete SCULLY.....	4115
Neil WILLITS.....	4113



UC DAVIS
DEPARTMENT
OF STATISTICS
 Mathematical Sciences Building
 Fourth Floor
FALL 2018

DEPARTMENT OF STATISTICS STAFF

Daniel Chang
Grants & Contracts Manager
4118C, dlchang@ucdavis.edu

Andi Carr,
Master's Program Coordinator
4118D, abcarr@ucdavis.edu

Nehad Ismail,
Systems Administrator
4206 MSB, nnismail@ucdavis.edu

Michael Jin,
Computing Resource Specialist
4202 MSB, micjin@ucdavis.edu

Kimberly McMullen,
Undergraduate Programs Coordinator
4118B MSB, kimcmullen@ucdavis.edu

Olga Rodriguez,
Accounting Assistant
4118 MSB, oirodriguez@ucdavis.edu

Sarah Driver,
Graduate Programs Coordinator,
Advising Supervisor
4118E, sbdriver@ucdavis.edu

Pete Scully
Management Services Officer
4115 MSB, pscully@ucdavis.edu

Mohammad Sahtout
Senior Statistician
4113 MSB, mosahtout@ucdavis.edu

Graduate Group Chair:
Danielle Harvey
MedSci 1C, djharvey@ucdavis.edu

Primary Graduate Adviser:
Christiana Drake
4101 MSB, cmdrake@ucdavis.edu

M.S. Graduate Adviser:
Miriam Nuno
MedSci 1C, mnuno@ucdavis.edu

Biostatistics mailing address:
Graduate Group in Biostatistics
University of California
One Shields Ave.
Davis, California 95616
Tel: (530) 752-2361
Fax: (530) 752-7099



RESOURCES AND OTHER USEFUL INFORMATION

Computing

There are two computer labs in the Department of Statistics, which serves as administrative home for the Graduate Group in Biostatistics. These labs are located in the Mathematical Sciences Building and have many Windows-based computers with statistical software packages. Additional computing is available through workstations operating on a version of Unix. Access to common statistical software such as R is available through these computers.

Graduate Student Resources and Forms

The Office of Graduate Studies (<https://grad.ucdavis.edu>) handles all of the academic and administrative policies affecting graduate students. There is a lot of information available on the website, including necessary forms for exams and advancement to candidacy, financial support, and general information for graduate students. An important resource for all regulations that apply to graduate students is the Graduate Studies website: <https://grad.ucdavis.edu/resources/resource-guide>.

Biostatistics website, contacts and student organization

More information about the current program faculty, committees, and student representatives may be found on the Graduate Group in Biostatistics website (<http://biostat.ucdavis.edu/>). Students are encouraged to bring any problems or concerns to the attention of the Graduate Master Adviser, their mentor, any of the other graduate advisors, the program chair, or Pete Scully, the graduate staff administrator. The Biostatistics graduate students maintain their own organization, selecting representatives, a web master and a President who leads the organization. Active participation of Biostatistics students in their student organization is highly encouraged.

Graduate Student Association (GSA): According to the GSA website (<https://gsa.ucdavis.edu>), the GSA was established "to provide a forum where matters of concern to graduate and professional students may be discussed, where opinions on actions of the Administration, departments and graduate groups may be initiated, and to conduct programs and services of special interest to graduate studies." The GSA is located at 253 South Silo. There are typically representatives from each graduate program, graduate group, etc. that meet throughout the year and discuss issues of importance to graduate and professional students. Check the website for other offerings by the GSA.

ACADEMIC CALENDAR

2020-21

Campus Dates	Fall '20	Winter '21	Spring '21
Quarter begins	Sept 28	Jan 4	Mar 25
Instruction begins	Sept 30	Jan 4	Mar 29
Instruction ends	Dec 11	Mar 12	June 3
Quarter ends	Dec 18	Mar 19	June 10
10th Day of Instruction (Drop designated 10 day drop courses; PELP deadline)	Oct 13	Jan 15	Apr 9
12th Day of Instruction (Wait list ends; last day to add without a PTA)	Oct 15	Jan 20	Apr 13
20th Day of Instruction)20 day drop courses)	Oct 27	Feb 1	Apr 23
Holidays	Nov 11, 26, Dec 24, 31	Jan 1, 18, Feb 15	Mar 22, 26 May 31
Diploma Date	Dec TBD	Mar TBD	June TBD
Graduate Commencement			June TBD

Biostatistics Department Dates	
New Student Orientation	September 23, 2020
PhD Written Pre-Qualifying Exam	Spring Break 2020
Statistics / Biostatistics Spring Picnic	June 2020

All dates subject to change

PhD Deadlines			MS Deadlines		
DEGREE LIST	File PhD Candidacy*	File PhD Thesis online	DEGREE LIST	File MS Candidacy*	Final Date for MS Exam**
Fall 2020	Oct 9	Nov 20, 2020	Dec 2021	Nov 6	Dec 18, 2020
Winter 2021	Jan 15	Feb 26, 2021	Mar 2022	Feb 5	Mar 19, 2021
Spring 2021	April 9	May 21, 2021	June 2021	April 22	June 10, 2021
Fall 2021	July 30	Sep 10, 2021	Sept 2021	July 30	Sep 10, 2021

*Candidacy filing dates are suggestions and not firm deadlines. PhD Thesis filing dates however are firm deadlines.

**Final date for MS Exam report to be submitted to Graduate Studies upon completion of coursework.

GRADUATE FEES AND TUITION REMISSIONS, 2019-20

For the most up to date tuition and fee information, please see the UC Davis Finance & Business website: <https://financeandbusiness.ucdavis.edu/student-resources/tuition-fees/graduate>.

Eligibility and Remission Benefit information can be found on the Graduate Studies website: <https://grad.ucdavis.edu/eligibility-remission-benefit>

The University of California, Davis

CODE OF ACADEMIC CONDUCT

Honesty, Fairness, Integrity

This Code of Academic Conduct exists to support high standards of behavior and to ensure fair evaluation of student learning. Students who violate the Code of Academic Conduct are subject to disciplinary sanctions that include censure, probation, suspension, deferred separation, or dismissal from the University of California. Unless specifically authorized by the instructor in writing, misconduct includes, but is not limited to the following:

§ Academic misconduct on exams or other coursework

- Copying or attempting to copy from another student, allowing another student to copy, or collaborating with another student on an exam
- Displaying or using any unauthorized material such as notes, cheat-sheets, or electronic devices
- Looking at another student's exam
- Not following an instructor's directions regarding an exam
- Talking, texting or communicating during an exam
- Altering assignments or exams for re-grading purposes
- Bringing pre-written answers to an exam
- Having another person take an exam for you, or taking an exam for another student
- Theft of academic work
- Unexcused exit and re-entry during an exam period

§ Plagiarism

- Taking credit for any work created by another person; work includes, but is not limited to books, articles, experimental methodology or results, compositions, images, lectures, computer programs, or internet postings
- Copying any work belonging to another person without indicating that the information is copied and properly citing the source of the work
- Using another person's presentation of ideas without putting such work in your own words or form and giving proper citation
- Creating false citations that do not correspond to the information you have used
- Plagiarizing one's own work

§ Unauthorized collaboration

- Working together on graded coursework without permission of the instructor
- Working with another student beyond the limits set by the instructor
- Providing or obtaining unauthorized assistance on graded coursework

§ Misuse of an instructor's course materials or the materials of others

- Posting or sharing any course materials of an instructor without the explicit written permission of that instructor
- Purchasing or copying assignments or solutions, to complete any portion of graded work, without the instructor's permission
- Unauthorized use of another student's work

§ Lying or fraud

- Giving false excuses to obtain exceptions for deadlines, to postpone an exam, or for other reasons
- Forging signatures or submitting documents containing false information
- Making false statements regarding attendance at class sessions, requests for late drops, incomplete grades, or other reasons

§ Intimidation or disruption

- Pressuring an instructor or teaching assistant to regrade work, change a final grade, or obtain an exception such as changing the date of an exam, extending a deadline, or granting an incomplete grade
- Refusing to leave an office when directed to do so

- Physically or verbally intimidating or threatening an instructor, teaching assistant or staff person, including yelling at them, invading personal space, or engaging in any form of harassment
 - Repeatedly contacting or following an instructor, teaching assistant, or staff person when directed not to do so
 - Misusing a classroom electronic forum by posting material unrelated to the course
 - Interfering with an instructor's or teaching assistant's ability to teach a class, or interfering with other students' participation in a class by interrupting, physically causing a disruption, or excessive talking

Upholding the UC Davis Code of Academic Conduct

Students, faculty, and University administration all have a role in maintaining an honest and secure learning environment at UC Davis.

§ The success of our Code of Academic Conduct depends largely on the degree that it is willingly supported by students.

Students:

- Are responsible to know what constitutes cheating. Ignorance is not an excuse.
- Are required to do their own work unless otherwise allowed by the instructor.
- Are encouraged to help prevent cheating by reminding others about this Code and hold each other accountable by reporting any form of suspected cheating to the University.
- Shall respect the copyright privileges of works produced by faculty, the University, and other copyright holders.
- Shall not threaten, intimidate, or pressure instructors or teaching assistants, or interfere with grading any coursework.
- Shall not disrupt classes or interfere with the teaching or learning environment.

§ Faculty members and instructors are responsible for teaching courses and evaluating student work, and are governed by University of California and UC Davis policies and regulations. Regulation 550 of the Davis Division of the Academic Senate addresses academic misconduct. Faculty and instructors:

- Will provide students with a course outline containing information about the content of the course, amount and kind of work expected, examination and grading procedures and notice of the Code of Academic Conduct.
- Should monitor examinations to help prevent academic misconduct.
- Shall report all suspected cases of cheating and other misconduct to the Office of Student Support and Judicial Affairs (<http://ossja.ucdavis.edu/>).

§ The University has delegated authority and responsibility to the Office of Student Support and Judicial Affairs (OSSJA) for the adjudication and resolution of academic misconduct cases. OSSJA maintains records of academic misconduct. The University:

- Shall educate faculty and students about the Code of Academic Conduct.
- Shall provide physical settings such as classrooms and labs for examinations that minimize opportunities for academic misconduct.
- Shall assist and train faculty and teaching assistants about how to prevent and address academic misconduct.

§ Submitting Reports and Judicial Procedures:

- The Code of Academic Conduct governs academic conduct at UC Davis.
- Faculty have sole authority, as granted by the Academic Senate, to evaluate a student's academic performance and assign grades. If academic misconduct is admitted or established, instructors may assign a grade penalty no greater than "F" for the course in question. If a report is pending at the end of an academic term, instructors should assign a temporary grade of "Y" for the course until the report is resolved.

§ A faculty/student panel, convened by OSSJA, shall conduct formal hearings to adjudicate contested cases of academic misconduct, unless the right to a formal hearing has been withdrawn. The right to a formal hearing may be withdrawn because of a prior finding of misconduct.

- Instructors and teaching assistants may direct a student to leave a class immediately if the student's behavior is disruptive.
- Instructors, teaching assistants, and staff persons should contact police (752-1230 or 911) if they feel physically threatened.

GRADUATE GROUP IN BIostatISTICS

Please visit the graduate group website:

<http://biostat.ucdavis.edu>

The University of California does not discriminate on the basis of race, color, national origin, religion, sex, sexual orientation, handicap, age, veteran's status, medical condition, ancestry, or marital status.

The University of California is an affirmative action/equal opportunity employer. Call (530) 752-2071 for more information. Speech and hearing impaired persons may dial (530) 752-7320 (TDD)