Statistics

The Department of Statistics offers the Master of Arts (MA) and Doctor of Philosophy (PhD) degrees.

Master of Arts (MA)

The Statistics MA program prepares students for careers that require statistical skills. It focuses is on tackling statistical challenges encountered by industry rather than preparing for a PhD. The program is for full-time students and is designed to be completed in two semesters (fall and spring).

There is no way to transfer into the PhD program from the MA program. Students must apply to the PhD program.

Doctor of Philosophy (PhD)

The Statistics PhD program is rigorous, yet welcoming to students with interdisciplinary interests and different levels of preparation. The standard PhD program in statistics provides a broad background in probability theory and applied and theoretical statistics.

There are two designated emphasis (DE) tracks available to students in the PhD program who wish to pursue interdisciplinary work formally: Computational Science and Engineering (http://citris-uc.org/initiatives/decse) and Computational and Genomic Biology (http://ccb.berkeley.edu/academics/designated-emphasis).

- Admission to the University (p. 1)
- Admission to the Program (p. 2)

Admission to the University

Minimum Requirements for Admission

The following minimum requirements apply to all graduate programs and will be verified by the Graduate Division:

1. A bachelor's degree or recognized equivalent from an accredited institution;
2. A grade point average of B or better (3.0);
3. If the applicant comes from a country or political entity (e.g., Quebec) where English is not the official language, adequate proficiency in English to do graduate work, as evidenced by a TOEFL score of at least 90 on the iBT test, 570 on the paper-and-pencil test, or an IELTS Band score of at least 7 on a 9-point scale (note that individual programs may set higher levels for any of these); and
4. Sufficient undergraduate training to do graduate work in the given field.

Applicants Who Already Hold a Graduate Degree

The Graduate Council views academic degrees not as vocational training certificates, but as evidence of broad training in research methods, independent study, and articulation of learning. Therefore, applicants who already have academic graduate degrees should be able to pursue new subject matter at an advanced level without need to enroll in a related or similar graduate program.

Programs may consider students for an additional academic master's or professional master's degree only if the additional degree is in a distinctly different field.

Applicants admitted to a doctoral program that requires a master's degree to be earned at Berkeley as a prerequisite (even though the applicant already has a master's degree from another institution in the same or a closely allied field of study) will be permitted to undertake the second master's degree, despite the overlap in field.

The Graduate Division will admit students for a second doctoral degree only if they meet the following guidelines:

1. Applicants with doctoral degrees may be admitted for an additional doctoral degree only if that degree program is in a general area of knowledge distinctly different from the field in which they earned their original degree. For example, a physics PhD could be admitted to a doctoral degree program in music or history; however, a student with a doctoral degree in mathematics would not be permitted to add a PhD in statistics.
2. Applicants who hold the PhD degree may be admitted to a professional doctorate or professional master's degree program if there is no duplication of training involved.

Applicants may apply only to one single degree program or one concurrent degree program per admission cycle.

Required Documents for Applications

1. **Transcripts:** Applicants may upload *unofficial* transcripts with your application for the departmental initial review. *If the applicant is admitted,* then *official* transcripts of all college-level work will be required. Official transcripts must be in sealed envelopes as issued by the school(s) attended. If you have attended Berkeley, upload your unofficial transcript with your application for the departmental initial review. *If you are admitted,* an official transcript with evidence of degree conferral *will not* be required.
2. **Letters of recommendation:** Applicants may request online letters of recommendation through the online application system. Hard copies of recommendation letters must be sent directly to the program, not the Graduate Division.
3. **Evidence of English language proficiency:** All applicants from countries or political entities in which the official language is not English are required to submit official evidence of English language proficiency. This applies to applicants from Bangladesh, Burma, Nepal, India, Pakistan, Latin America, the Middle East, the People's Republic of China, Taiwan, Japan, Korea, Southeast Asia, most European countries, and Quebec (Canada). However, applicants who, at the time of application, have already completed at least one year of full-time academic course work with grades of B or better at a US university may submit an official transcript from the US university to fulfill this requirement. The following courses will not fulfill this requirement:
   - courses in English as a Second Language,
   - courses conducted in a language other than English,
   - courses that will be completed after the application is submitted, and
   - courses of a non-academic nature.

   If applicants have previously been denied admission to Berkeley on the basis of their English language proficiency, they must submit new test scores that meet the current minimum from one of the standardized tests. Official TOEFL score reports must be sent directly from Educational Test Services (ETS). The institution code for Berkeley is 4833. Official IELTS score reports must be mailed

directly to our office from British Council. TOEFL and IELTS score reports are only valid for two years.

Where to Apply

Visit the Berkeley Graduate Division application page (http://grad.berkeley.edu/admissions/apply).

Admission to the Program

In addition to the minimum requirements listed above, the following materials are required for admission:

1. The Online Graduate Application for Admission and Fellowships (http://grad.berkeley.edu/admissions/apply)**:**

We require applicants submit both the statement of purpose (http://grad.berkeley.edu/admissions/state_purpose.shtml) AND personal history statement (http://www.grad.berkeley.edu/admissions/personal_statement.shtml).

2. GRE General Test Scores: The GRE is required of all applicants. The test is composed of three sections. Please send your scores electronically to Institution Code 4833. To be valid, the GRE must have been taken within the past five years.

3. Descriptive List of Upper Division/Graduate Statistics and Math Coursework: Include the department, course number, title, instructor, grade, school, texts used and subject matter covered for all upper division and graduate level statistics and math courses you have taken.

The application process is entirely online. All supplemental materials such as transcripts and the descriptive list of courses must be uploaded as PDF files via the online application by the application deadline. Please do not mail copies of your transcripts, statement of purpose, letters of recommendations, GRE and TOEFL scores, resumes, or any other documents as they will not be included with your application.

For more information about graduate programs in statistics, including admission information, please visit our graduate programs page (http://statistics.berkeley.edu/programs/graduate).

Normative Time Requirements

Normative Time to Advancement

In the first year students must perform satisfactorily in preliminary course work. In the summer, students are required to embark on a short-term research project, internship, graduate student instructorship, reading course, or on another research activity.

In the second and third years, students continue to take courses, serve as a graduate student instructor, find an area for the oral qualifying exam, a potential thesis adviser and pass the oral qualifying exam in the spring semester of second year or in the fall semester of third year. With successful passing of the exam, students then advance to candidacy.

Normative Time in Candidacy

In the third and fourth years, students finalize a thesis topic, continue to conduct research and make satisfactory progress.

By the end of the fifth year students are expected to finish their thesis and give a lecture based on their work in a department seminar.

Total Normative Time

Total normative time is five years.

Time in Advancement

Curriculum

All students are required to take a minimum of 24 semester units of courses in the department numbered 204-272 inclusive for a letter grade. During their first year, students are normally expected to take four semester long graduate level courses. At least three of these should be from the following seven core PhD courses in Probability, Theoretical Statistics, and Applied Statistics:

Courses Required

STAT C205A	Probability Theory	4
STAT C205B	Probability Theory	4
STAT 204	Probability for Applications	4
STAT 210A	Theoretical Statistics	4
STAT 210B	Theoretical Statistics	4
STAT 215A	Statistical Models: Theory and Application	4
STAT 215B	Statistical Models: Theory and Application	4
STAT Electives from 204-272 (4 courses) - one may be upper division		12
STAT 375	Professional Preparation: Teaching of Probability and Statistics	2-4

A member of the PhD program committee (in consultation with the faculty mentor) may consent to substitute courses at a comparable level in other disciplines for some of these departmental graduate courses. These requirements can be altered by the PhD program committee (in consultation with the faculty mentor) in the following cases:

For students with strong interests in another discipline, when the faculty mentor recommends delaying one core PhD course to the second year and substituting a relevant graduate course from another department.

For students who need additional mathematical preparation, they could take MATH 105 (and MATH 104, if needed) in the first year, and only take two of the core PhD courses during that year, thus delaying one or two core PhD courses to the second year.

Students arriving with advanced standing, having done successful graduate course work at another institution prior to joining the program.

Preliminary Stage

After the first year in the program, the PhD program committee will decide if the student has passed the preliminary stage of the program or if the decision is reserved until the end of the second year. To continue in the program, students must pass the preliminary stage by the end of their second year.

Qualifying Examination

The qualifying examination is intended to determine whether students are ready to enter the research phase and are on track toward successfully completing the PhD. It consists of a 50-minute lecture by the student on a topic selected jointly by the student and the thesis adviser. The topic usually involves the student's research.

Time in Candidacy

Advancement

Advancing to candidacy means a student is ready to write a doctoral dissertation. Students must apply for advancement to candidacy once they have successfully passed the qualifying examination.

Dissertation Presentation/Finishing Talk

Prior to filing, the thesis should be presented at an appropriate seminar in the department.

Required Professional Development

Students enrolled in the graduate program before fall 2016 are required to serve as a Graduate Student Instructor (http://statistics.berkeley.edu/employment/gsi-and-reader) (GSI) for a minimum of 20 hours (equivalent to a 50% GSI appointment) during a regular academic semester by the end of their third year in the program.

Effective with the fall 2016 entering class, students are required to serve as a Graduate Student Instructor (http://statistics.berkeley.edu/employment/gsi-and-reader) (GSI) for a minimum of two regular academic semesters and complete at least 40 hours prior to graduation (20 hours is equivalent to a 50% GSI appointment for a semester) for a course numbered 150 and above.

Unit Requirements

In order to obtain the MA in Statistics, admitted MA students must complete a minimum of 24 units of courses and pass a comprehensive examination.

In extremely rare cases, a thesis option may be considered by the MA advisers. Typically, this will be when either the option has been offered to the student at the time of admission, or if the student arrives with substantial progress in research in an area of interest to our faculty. When taking the thesis option, a total of 20 units is need to complete the degree.

Curriculum

Courses Required

STAT 201A	Introduction to Probability at an Advanced Level	4
STAT 201B	Introduction to Statistics at an Advanced Level	4
STAT 243	Introduction to Statistical Computing	4
STAT 230A	Linear Models	4
STAT 222	Masters of Statistics Capstone Project	4
Elective		4

The capstone will consist of a team-based learning experience that will give students the opportunity to work on a real-world problem and carry out a substantial data analysis project. It will culminate with a written report and an oral presentation of findings. The elective will depend on the student's interests and will be decided in consultation with advisers.

Capstone/Thesis (Plan I)

If approved for the thesis option, you must find three faculty to be on your thesis committee. Though not required, it is strongly encouraged that one of the faculty be from outside the Statistics Department. Both you and the thesis committee chair must agree on the topic of your thesis. Further information on how to file a thesis is available on the MA program web page (http://statistics.berkeley.edu/programs/graduate/masters).

Capstone/Comprehensive Exam (Plan II)

On the Saturday before the spring semester begins in January, students will take a comprehensive exam on the theoretical foundations of statistics. There will be a two hour exam on the material of STAT 201A and a two hour exam on the material of STAT 201B. All students taking the exam will receive copies of previous examinations.

Statistics

Expand all course descriptions [+]Collapse all course descriptions [-]

STAT 200A Introduction to Probability and Statistics at an Advanced Level 4 Units

Terms offered: Fall 2018, Fall 2011, Fall 2010
Probability spaces, random variables, distributions in probability and statistics, central limit theorem, Poisson processes, transformations involving random variables, estimation, confidence intervals, hypothesis testing, linear models, large sample theory, categorical models, decision theory.
Introduction to Probability and Statistics at an Advanced Level: Read More [+]

Rules & Requirements

Prerequisites: Multivariable calculus and one semester of linear algebra

Credit Restrictions: Students will receive no credit for Statistics 200A after completing Statistics 201A-201B.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Introduction to Probability and Statistics at an Advanced Level: Read Less [-]

STAT 200B Introduction to Probability and Statistics at an Advanced Level 4 Units

Terms offered: Spring 2019, Spring 2012, Spring 2011
Probability spaces, random variables, distributions in probability and statistics, central limit theorem, Poisson processes, transformations involving random variables, estimation, confidence intervals, hypothesis testing, linear models, large sample theory, categorical models, decision theory.
Introduction to Probability and Statistics at an Advanced Level: Read More [+]

Rules & Requirements

Prerequisites: Multivariable calculus and one semester of linear algebra

Credit Restrictions: Students will receive no credit for Statistics 200A-200B after completing Statistics 201A-201B.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Introduction to Probability and Statistics at an Advanced Level: Read Less [-]

STAT C200C Principles and Techniques of Data Science 4 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019
Explores the data science lifecycle: question formulation, data collection and cleaning, exploratory, analysis, visualization, statistical inference, prediction, and decision-making. Focuses on quantitative critical thinking and key principles and techniques: languages for transforming, querying and analyzing data; algorithms for machine learning methods: regression, classification and clustering; principles of informative visualization; measurement error and prediction; and techniques for scalable data processing. Research term project.
Principles and Techniques of Data Science: Read More [+]

Rules & Requirements

Prerequisites: Computer Science/Information/Statistics C8 or Engineering 7; and either Computer Science 61A or Computer Science 88. Corequisite: Mathematics 54 or Electrical Engineering 16A

Credit Restrictions: Students will not receive credit for this course after taking CS c100 / Stat c100

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture, 1 hour of discussion, and 1 hour of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Also listed as: COMPSCI C200A

Principles and Techniques of Data Science: Read Less [-]

STAT 201A Introduction to Probability at an Advanced Level 4 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017
Distributions in probability and statistics, central limit theorem, Poisson processes, modes of convergence, transformations involving random variables.
Introduction to Probability at an Advanced Level: Read More [+]

Rules & Requirements

Prerequisites: Undergraduate probability at the level of Statistics 134, multivariable calculus (at the level of Berkeley's Mathematics 53) and linear algebra (at the level of Berkeley's Mathematics 54)

Credit Restrictions: Students will receive no credit for STAT 201A after completing STAT 200A.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Introduction to Probability at an Advanced Level: Read Less [-]

STAT 201B Introduction to Statistics at an Advanced Level 4 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017
Estimation, confidence intervals, hypothesis testing, linear models, large sample theory, categorical models, decision theory.
Introduction to Statistics at an Advanced Level: Read More [+]
Rules & Requirements

Prerequisites: Undergraduate probability at the level of Statistics 134, multivariable calculus (at the level of Berkeley's Mathematics 53) and linear algebra (at the level of Berkeley's Mathematics 54)

Credit Restrictions: Students will receive no credit for Statistics 201B after completing Statistics 200B.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Introduction to Statistics at an Advanced Level: Read Less [-]

STAT 204 Probability for Applications 4 Units

Terms offered: Fall 2019, Spring 2017, Spring 2015
A treatment of ideas and techniques most commonly found in the applications of probability: Gaussian and Poisson processes, limit theorems, large deviation principles, information, Markov chains and Markov chain Monte Carlo, martingales, Brownian motion and diffusion.
Probability for Applications: Read More [+]
Rules & Requirements

Credit Restrictions: Students will receive no credit for Statistics 204 after completing Statistics 205A-205B.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Instructor: Evans

Probability for Applications: Read Less [-]

STAT C205A Probability Theory 4 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017
The course is designed as a sequence with Statistics C205B/ Mathematics C218B with the following combined syllabus. Measure theory concepts needed for probability. Expection, distributions. Laws of large numbers and central limit theorems for independent random variables. Characteristic function methods. Conditional expectations, martingales and martingale convergence theorems. Markov chains. Stationary processes. Brownian motion.
Probability Theory: Read More [+]
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Also listed as: MATH C218A

Probability Theory: Read Less [-]

STAT C205B Probability Theory 4 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018
The course is designed as a sequence with with Statistics C205A/ Mathematics C218A with the following combined syllabus. Measure theory concepts needed for probability. Expection, distributions. Laws of large numbers and central limit theorems for independent random variables. Characteristic function methods. Conditional expectations, martingales and martingale convergence theorems. Markov chains. Stationary processes. Brownian motion.
Probability Theory: Read More [+]
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Also listed as: MATH C218B

Probability Theory: Read Less [-]

STAT C206A Advanced Topics in Probability and Stochastic Process 3 Units

Terms offered: Fall 2016, Fall 2015, Fall 2014, Fall 2013
The topics of this course change each semester, and multiple sections may be offered. Advanced topics in probability offered according to students demand and faculty availability.
Advanced Topics in Probability and Stochastic Process: Read More [+]
Rules & Requirements

Prerequisites: Statistics C205A-C205B or consent of instructor

Repeat rules: Course may be repeated for credit with instructor consent.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Also listed as: MATH C223A

Advanced Topics in Probability and Stochastic Process: Read Less [-]

STAT C206B Advanced Topics in Probability and Stochastic Processes 3 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018
The topics of this course change each semester, and multiple sections may be offered. Advanced topics in probability offered according to students demand and faculty availability.
Advanced Topics in Probability and Stochastic Processes: Read More [+]
Rules & Requirements

Repeat rules: Course may be repeated for credit with instructor consent.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Also listed as: MATH C223B

Advanced Topics in Probability and Stochastic Processes: Read Less [-]

STAT 210A Theoretical Statistics 4 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017
An introduction to mathematical statistics, covering both frequentist and Bayesian aspects of modeling, inference, and decision-making. Topics include statistical decision theory; point estimation; minimax and admissibility; Bayesian methods; exponential families; hypothesis testing; confidence intervals; small and large sample theory; and M-estimation.
Theoretical Statistics: Read More [+]
Rules & Requirements

Prerequisites: Linear algebra, real analysis, and a year of upper division probability and statistics

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Theoretical Statistics: Read Less [-]

STAT 210B Theoretical Statistics 4 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018
Introduction to modern theory of statistics; empirical processes, influence functions, M-estimation, U and V statistics and associated stochastic decompositions; non-parametric function estimation and associated minimax theory; semiparametric models; Monte Carlo methods and bootstrap methods; distributionfree and equivariant procedures; topics in machine learning. Topics covered may vary with instructor.
Theoretical Statistics: Read More [+]
Rules & Requirements

Prerequisites: Statistics 210A and a graduate level probability course; a good understanding of various notions of stochastic convergence

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Theoretical Statistics: Read Less [-]

STAT 212A Topics in Theoretical Statistics 3 Units

Terms offered: Fall 2015, Fall 2012, Fall 2011
This course introduces the student to topics of current research interest in theoretical statistics. Recent topics include information theory, multivariate analysis and random matrix theory, high-dimensional inference. Typical topics have been model selection; empirical and point processes; the bootstrap, stochastic search, and Monte Carlo integration; information theory and statistics; semi- and non-parametric modeling; time series and survival analysis.
Topics in Theoretical Statistics: Read More [+]
Rules & Requirements

Prerequisites: 210 or 205 and 215

Repeat rules: Course may be repeated for credit with instructor consent.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Formerly known as: 216A-216B and 217A-217B

Topics in Theoretical Statistics: Read Less [-]

STAT 212B Topics in Theoretical Statistics 3 Units

Terms offered: Spring 2016
This course introduces the student to topics of current research interest in theoretical statistics. Recent topics include information theory, multivariate analysis and random matrix theory, high-dimensional inference. Typical topics have been model selection; empirical and point processes; the bootstrap, stochastic search, and Monte Carlo integration; information theory and statistics; semi- and non-parametric modeling; time series and survival analysis.
Topics in Theoretical Statistics: Read More [+]
Rules & Requirements

Prerequisites: 210 or 205 and 215

Repeat rules: Course may be repeated for credit with instructor consent.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Formerly known as: 216A-216B and 217A-217B

Topics in Theoretical Statistics: Read Less [-]

STAT 215A Statistical Models: Theory and Application 4 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017
Applied statistics with a focus on critical thinking, reasoning skills, and techniques. Hands-on-experience with solving real data problems with high-level programming languages such as R. Emphasis on examining the assumptions behind standard statistical models and methods. Exploratory data analysis (e.g., graphical data summaries, PCAs, clustering analysis). Model formulation, fitting, and validation and testing. Linear regression and generalizations (e.g., GLMs, ridge regression, lasso).
Statistical Models: Theory and Application: Read More [+]
Rules & Requirements

Prerequisites: Linear algebra, calculus, upper division probability and statistics, and familiarity with high-level programming languages. Statistics 133, 134, and 135 recommended

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Statistical Models: Theory and Application: Read Less [-]

STAT 215B Statistical Models: Theory and Application 4 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018
Course builds on 215A in developing critical thinking skills and the techniques of advanced applied statistics. Particular topics vary with instructor. Examples of possible topics include planning and design of experiments, ANOVA and random effects models, splines, classification, spatial statistics, categorical data analysis, survival analysis, and multivariate analysis.
Statistical Models: Theory and Application: Read More [+]
Rules & Requirements

Prerequisites: Statistics 215A or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Statistical Models: Theory and Application: Read Less [-]

STAT 222 Masters of Statistics Capstone Project 4 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018
The capstone project is part of the masters degree program in statistics. Students engage in professionally-oriented group research under the supervision of a research advisor. The research synthesizes the statistical, computational, economic, and social issues involved in solving complex real-world problems.
Masters of Statistics Capstone Project: Read More [+]
Rules & Requirements

Prerequisites: Statistics 201A-201B, 243. Restricted to students who have been admitted to the one-year Masters Program in Statistics beginning fall 2012 or later

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar and 1 hour of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Masters of Statistics Capstone Project: Read Less [-]

STAT 230A Linear Models 4 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018
Theory of least squares estimation, interval estimation, and tests under the general linear fixed effects model with normally distributed errors. Large sample theory for non-normal linear models. Two and higher way layouts, residual analysis. Effects of departures from the underlying assumptions. Robust alternatives to least squares.
Linear Models: Read More [+]
Rules & Requirements

Prerequisites: Matrix algebra, a year of calculus, two semesters of upper division or graduate probability and statistics

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Linear Models: Read Less [-]

STAT 232 Experimental Design 4 Units

Terms offered: Fall 2018, Spring 2013, Fall 2009
Randomization, blocking, factorial design, confounding, fractional replication, response surface methodology, optimal design. Applications.
Experimental Design: Read More [+]
Rules & Requirements

Prerequisites: 200B or equivalent

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Experimental Design: Read Less [-]

STAT 238 Bayesian Statistics 3 Units

Terms offered: Fall 2016
Bayesian methods and concepts: conditional probability, one-parameter and multiparameter models, prior distributions, hierarchical and multi-level models, predictive checking and sensitivity analysis, model selection, linear and generalized linear models, multiple testing and high-dimensional data, mixtures, non-parametric methods. Case studies of applied modeling. In-depth computational implementation using Markov chain Monte Carlo and other techniques. Basic theory for Bayesian methods and decision theory. The selection of topics may vary from year to year.
Bayesian Statistics: Read More [+]
Objectives Outcomes

Course Objectives: develop Bayesian models for new types of data
implement Bayesian models and interpret the results
read and discuss Bayesian methods in the literature
select and build appropriate Bayesian models for data to answer research questions
understand and describe the Bayesian perspective and its advantages and disadvantages compared to classical methods

Rules & Requirements

Prerequisites: Probability and mathematical statistics at the level of Stat 134 and Stat 135 or, ideally, Stat 201A and Stat 201B

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Bayesian Statistics: Read Less [-]

STAT 239A The Statistics of Causal Inference in the Social Science 4 Units

Terms offered: Fall 2015, Fall 2014
Approaches to causal inference using the potential outcomes framework. Covers observational studies with and without ignorable treatment assignment, randomized experiments with and without noncompliance, instrumental variables, regression discontinuity, sensitivity analysis and randomization inference. Applications are drawn from a variety of fields including political science, economics, sociology, public health and medicine.
The Statistics of Causal Inference in the Social Science: Read More [+]
Rules & Requirements

Prerequisites: At least one graduate matrix based multivariate regression course in addition to introductory statistics and probability

Hours & Format

Fall and/or spring: 15 weeks - 3-3 hours of lecture and 1-2 hours of discussion per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade. This is part one of a year long series course. A provisional grade of IP (in progress) will be applied and later replaced with the final grade after completing part two of the series.

Instructor: Sekhon

The Statistics of Causal Inference in the Social Science: Read Less [-]

STAT 239B Quantitative Methodology in the Social Sciences Seminar 4 Units

Terms offered: Spring 2016, Spring 2015
A seminar on successful research designs and a forum for students to discuss the research methods needed in their own work, supplemented by lectures on relevant statistical and computational topics such as matching methods, instrumental variables, regression discontinuity, and Bayesian, maximum likelihood and robust estimation. Applications are drawn from political science, economics, sociology, and public health. Experience with R is assumed.
Quantitative Methodology in the Social Sciences Seminar: Read More [+]
Rules & Requirements

Prerequisites: Statistics 239A or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3-3 hours of lecture and 1-2 hours of discussion per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade. This is part two of a year long series course. Upon completion, the final grade will be applied to both parts of the series.

Quantitative Methodology in the Social Sciences Seminar: Read Less [-]

STAT C239A The Statistics of Causal Inference in the Social Science 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016
Approaches to causal inference using the potential outcomes framework. Covers observational studies with and without ignorable treatment assignment, randomized experiments with and without noncompliance, instrumental variables, regression discontinuity, sensitivity analysis and randomization inference. Applications are drawn from a variety of fields including political science, economics, sociology, public health and medicine.
The Statistics of Causal Inference in the Social Science: Read More [+]
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Also listed as: POL SCI C236A

The Statistics of Causal Inference in the Social Science: Read Less [-]

STAT C239B Quantitative Methodology in the Social Sciences Seminar 4 Units

Terms offered: Spring 2018, Spring 2017
A seminar on successful research designs and a forum for students to discuss the research methods needed in their own work, supplemented by lectures on relevant statistical and computational topics such as matching methods, instrumental variables, regression discontinuity, and Bayesian, maximum likelihood and robust estimation. Applications are drawn from political science, economics, sociology, and public health. Experience with R is assumed.
Quantitative Methodology in the Social Sciences Seminar: Read More [+]
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Also listed as: POL SCI C236B

Quantitative Methodology in the Social Sciences Seminar: Read Less [-]

STAT 240 Nonparametric and Robust Methods 4 Units

Terms offered: Fall 2017, Fall 2016, Spring 2015
Standard nonparametric tests and confidence intervals for continuous and categorical data; nonparametric estimation of quantiles; robust estimation of location and scale parameters. Efficiency comparison with the classical procedures.
Nonparametric and Robust Methods: Read More [+]
Rules & Requirements

Prerequisites: A year of upper division probability and statistics

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Nonparametric and Robust Methods: Read Less [-]

STAT C241A Statistical Learning Theory 3 Units

Terms offered: Fall 2019, Fall 2016, Fall 2015
Classification regression, clustering, dimensionality, reduction, and density estimation. Mixture models, hierarchical models, factorial models, hidden Markov, and state space models, Markov properties, and recursive algorithms for general probabilistic inference nonparametric methods including decision trees, kernal methods, neural networks, and wavelets. Ensemble methods.
Statistical Learning Theory: Read More [+]
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Instructors: Bartlett, Jordan, Wainwright

Also listed as: COMPSCI C281A

Statistical Learning Theory: Read Less [-]

STAT C241B Advanced Topics in Learning and Decision Making 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2014
Recent topics include: Graphical models and approximate inference algorithms. Markov chain Monte Carlo, mean field and probability propagation methods. Model selection and stochastic realization. Bayesian information theoretic and structural risk minimization approaches. Markov decision processes and partially observable Markov decision processes. Reinforcement learning.
Advanced Topics in Learning and Decision Making: Read More [+]
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Instructors: Bartlett, Jordan, Wainwright

Also listed as: COMPSCI C281B

Advanced Topics in Learning and Decision Making: Read Less [-]

STAT 243 Introduction to Statistical Computing 4 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017
Concepts in statistical programming and statistical computation, including programming principles, data and text manipulation, parallel processing, simulation, numerical linear algebra, and optimization.
Introduction to Statistical Computing: Read More [+]
Objectives Outcomes

Student Learning Outcomes: Become familiar with concepts and tools for reproducible research and good scientific computing practices.
Operate effectively in a UNIX environment and on remote servers.
Program effectively in languages including R and Python with an advanced knowledge of language functionality and an understanding of general programming concepts.
Understand in depth and make use of principles of numerical linear algebra, optimization, and simulation for statistics-related research.

Rules & Requirements

Prerequisites: Graduate standing

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Introduction to Statistical Computing: Read Less [-]

STAT 244 Statistical Computing 4 Units

Terms offered: Spring 2011, Spring 2010, Spring 2009
Algorithms in statistical computing: random number generation, generating other distributions, random sampling and permutations. Matrix computations in linear models. Non-linear optimization with applications to statistical procedures. Other topics of current interest, such as issues of efficiency, and use of graphics.
Statistical Computing: Read More [+]
Rules & Requirements

Prerequisites: Knowledge of a higher level programming language

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Statistical Computing: Read Less [-]

STAT C245A Introduction to Modern Biostatistical Theory and Practice 4 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019, Spring 2018
Course covers major topics in general statistical theory, with a focus on statistical methods in epidemiology. The course provides a broad theoretical framework for understanding the properties of commonly-used and more advanced methods. Emphasis is on estimation in nonparametric models in the context of contingency tables, regression (e.g., linear, logistic), density estimation and more. Topics include maximum likelihood and loss-based estimation, asymptotic linearity/ normality, the delta method, bootstrapping, machine learning, targeted maximum likelihood estimation. Comprehension of broad concepts is the main goal, but practical implementation in R is also emphasized. Basic knowledge of probability/statistics and calculus are assume
Introduction to Modern Biostatistical Theory and Practice: Read More [+]
Rules & Requirements

Prerequisites: Statistics 200A (may be taken concurrently)

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Instructor: Hubbard

Also listed as: PB HLTH C240A

Introduction to Modern Biostatistical Theory and Practice: Read Less [-]

STAT C245B Biostatistical Methods: Survival Analysis and Causality 4 Units

Terms offered: Fall 2019, Fall 2017, Fall 2015
Analysis of survival time data using parametric and non-parametric models, hypothesis testing, and methods for analyzing censored (partially observed) data with covariates. Topics include marginal estimation of a survival function, estimation of a generalized multivariate linear regression model (allowing missing covariates and/or outcomes), estimation of a multiplicative intensity model (such as Cox proportional hazards model) and estimation of causal parameters assuming marginal structural models. General theory for developing locally efficient estimators of the parameters of interest in censored data models. Computing techniques, numerical methods, simulation and general implementation of biostatistical analysis techniques with emphasis on data applications.
Biostatistical Methods: Survival Analysis and Causality: Read More [+]
Rules & Requirements

Prerequisites: Statistics 200B (may be taken concurrently)

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Instructor: van der Laan

Also listed as: PB HLTH C240B

Biostatistical Methods: Survival Analysis and Causality: Read Less [-]

STAT C245C Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine 4 Units

Terms offered: Fall 2018, Fall 2016, Fall 2015, Fall 2014
This course provides an introduction to computational statistics, with emphasis on statistical methods and software for addressing high-dimensional inference problems in biology and medicine. Topics include numerical and graphical data summaries, loss-based estimation (regression, classification, density estimation), smoothing, EM algorithm, Markov chain Monte-Carlo, clustering, multiple testing, resampling, hidden Markov models, in silico experiments.
Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine: Read More [+]

Rules & Requirements

Prerequisites: Statistics 200A or equivalent (may be taken concurrently)

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Instructor: Dudoit

Also listed as: PB HLTH C240C

Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine: Read Less [-]

STAT C245D Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine II 4 Units

Terms offered: Fall 2017, Fall 2015, Fall 2013
This course and Pb Hlth C240C/Stat C245C provide an introduction to computational statistics with emphasis on statistical methods and software for addressing high-dimensional inference problems that arise in current biological and medical research. The courses also discusses statistical computing resources, with emphasis on the R language and environment (www.r-project.org). Programming topics to be discussed include: data structures, functions, statistical models, graphical procedures, designing an R package, object-oriented programming, inter-system interfaces. The statistical and computational methods are motivated by and illustrated on data structures that arise in current high-dimensional inference problems in biology and medicine.
Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine II: Read More [+]

Rules & Requirements

Prerequisites: Statistics 200A-200B or Statistics 201A-201B (may be taken concurrently) or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Instructor: Dudoit

Also listed as: PB HLTH C240D

Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine II: Read Less [-]

STAT C245E Statistical Genomics 4 Units

Terms offered: Spring 2013, Fall 2012, Fall 2010, Fall 2009
Genomics is one of the fundamental areas of research in the biological sciences and is rapidly becoming one of the most important application areas in statistics. This is the first course of a two-semester sequence, which provides an introduction to statistical and computational methods for the analysis of meiosis, population genetics, and genetic mapping. The second course is Statistics C245F/Public Health C240F. The courses are primarily intended for graduate students and advanced undergraduate students from the mathematical sciences.
Statistical Genomics: Read More [+]

Rules & Requirements

Prerequisites: Statistics 200A and 200B or equivalent (may be taken concurrently). A course in algorithms and knowledge of at least one computing language (e.g., R, matlab) is recommended

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Instructors: Dudoit, Huang, Nielsen, Song

Also listed as: PB HLTH C240E

Statistical Genomics: Read Less [-]

STAT C245F Statistical Genomics 4 Units

Terms offered: Spring 2020, Spring 2018, Spring 2017, Spring 2016
Genomics is one of the fundamental areas of research in the biological sciences and is rapidly becoming one of the most important application areas in statistics. The first course in this two-semester sequence is Public Health C240E/Statistics C245E. This is the second course, which focuses on sequence analysis, phylogenetics, and high-throughput microarray and sequencing gene expression experiments. The courses are primarily intended for graduate students and advanced undergraduate students from the mathematical sciences.
Statistical Genomics: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Instructors: Dudoit, Huang, Nielsen, Song

Also listed as: PB HLTH C240F

Statistical Genomics: Read Less [-]

STAT C247C Longitudinal Data Analysis 4 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017
The course covers the statistical issues surrounding estimation of effects using data on subjects followed through time. The course emphasizes a regression model approach and discusses disease incidence modeling and both continuous outcome data/linear models and longitudinal extensions to nonlinear models (e.g., logistic and Poisson). The primary focus is from the analysis side, but mathematical intuition behind the procedures will also be discussed. The statistical/mathematical material includes some survival analysis, linear models, logistic and Poisson regression, and matrix algebra for statistics. The course will conclude with an introduction to recently developed causal regression techniques (e.g., marginal structural models). Time permitting, serially correlated data on ecological units will also be discussed.
Longitudinal Data Analysis: Read More [+]

Rules & Requirements

Prerequisites: 142, 145, 241 or equivalent courses in basic statistics, linear and logistic regression

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Instructors: Hubbard, Jewell

Also listed as: PB HLTH C242C

Longitudinal Data Analysis: Read Less [-]

STAT 248 Analysis of Time Series 4 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018
Frequency-based techniques of time series analysis, spectral theory, linear filters, estimation of spectra, estimation of transfer functions, design, system identification, vector-valued stationary processes, model building.
Analysis of Time Series: Read More [+]

Rules & Requirements

Prerequisites: 102 or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Analysis of Time Series: Read Less [-]

STAT 259 Reproducible and Collaborative Statistical Data Science 4 Units

Terms offered: Fall 2018, Fall 2017, Spring 2016
A project-based introduction to statistical data analysis. Through case studies, computer laboratories, and a term project, students will learn practical techniques and tools for producing statistically sound and appropriate, reproducible, and verifiable computational answers to scientific questions. Course emphasizes version control, testing, process automation, code review, and collaborative programming. Software tools may include Bash, Git, Python, and LaTeX.
Reproducible and Collaborative Statistical Data Science: Read More [+]
Rules & Requirements

Prerequisites: Statistics 133, Statistics 134, and Statistics 135 (or equivalent)

Credit Restrictions: Students will receive no credit for Statistics 259 after taking Statistics 159.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Reproducible and Collaborative Statistical Data Science: Read Less [-]

STAT 260 Topics in Probability and Statistics 3 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019
Special topics in probability and statistics offered according to student demand and faculty availability.
Topics in Probability and Statistics: Read More [+]
Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Topics in Probability and Statistics: Read Less [-]

STAT C261 Quantitative/Statistical Research Methods in Social Sciences 3 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014
Selected topics in quantitative/statistical methods of research in the social sciences and particularly in sociology. Possible topics include: analysis of qualitative/categorical data; loglinear models and latent-structure analysis; the analysis of cross-classified data having ordered and unordered categories; measure, models, and graphical displays in the analysis of cross-classified data; correspondence analysis, association analysis, and related methods of data analysis.
Quantitative/Statistical Research Methods in Social Sciences: Read More [+]
Rules & Requirements

Prerequisites: Consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Also listed as: SOCIOL C271D

Quantitative/Statistical Research Methods in Social Sciences: Read Less [-]

STAT 272 Statistical Consulting 3 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019
To be taken concurrently with service as a consultant in the department's drop-in consulting service. Participants will work on problems arising in the service and will discuss general ways of handling such problems. There will be working sessions with researchers in substantive fields and occasional lectures on consulting.
Statistical Consulting: Read More [+]
Rules & Requirements

Prerequisites: Some course work in applied statistics and permission of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of session per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Statistical Consulting: Read Less [-]

STAT 278B Statistics Research Seminar 1 - 4 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019
Special topics, by means of lectures and informational conferences.
Statistics Research Seminar: Read More [+]

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of seminar per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Statistics Research Seminar: Read Less [-]

STAT 298 Directed Study for Graduate Students 1 - 12 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019
Special tutorial or seminar on selected topics.
Directed Study for Graduate Students: Read More [+]

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer:
6 weeks - 1-16 hours of independent study per week
8 weeks - 1-12 hours of independent study per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Directed Study for Graduate Students: Read Less [-]

STAT 299 Individual Study Leading to Higher Degrees 0.5 - 12 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019
Individual study
Individual Study Leading to Higher Degrees: Read More [+]

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 2-36 hours of independent study per week

Summer:
6 weeks - 4-45 hours of independent study per week
8 weeks - 3-36 hours of independent study per week
10 weeks - 2.5-27 hours of independent study per week

Additional Details

Subject/Course Level: Statistics/Graduate

Grading: Letter grade.

Individual Study Leading to Higher Degrees: Read Less [-]

STAT 375 Professional Preparation: Teaching of Probability and Statistics 2 - 4 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019
Discussion, problem review and development, guidance of laboratory classes, course development, supervised practice teaching.
Professional Preparation: Teaching of Probability and Statistics: Read More [+]

Rules & Requirements

Prerequisites: Graduate standing and appointment as a graduate student instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 4 hours of laboratory per week

Additional Details

Subject/Course Level: Statistics/Professional course for teachers or prospective teachers

Grading: Offered for satisfactory/unsatisfactory grade only.

Formerly known as: Statistics 300

Professional Preparation: Teaching of Probability and Statistics: Read Less [-]

STAT 601 Individual Study for Master's Candidates 1 - 8 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019
Individual study in consultation with the graduate adviser, intended to provide an opportunity for qualified students to prepare themselves for the master's comprehensive examinations. Units may not be used to meet either unit or residence requirements for a master's degree.
Individual Study for Master's Candidates: Read More [+]
Rules & Requirements

Repeat rules: Course may be repeated for credit up to a total of 16 units.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer:
6 weeks - 1-10 hours of independent study per week
8 weeks - 1-8 hours of independent study per week

Additional Details

Subject/Course Level: Statistics/Graduate examination preparation

Grading: Offered for satisfactory/unsatisfactory grade only.

Individual Study for Master's Candidates: Read Less [-]

STAT 602 Individual Study for Doctoral Candidates 1 - 8 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019
Individual study in consultation with the graduate adviser, intended to provide an opportunity for qualified students to prepare themselves for certain examinations required of candidates for the Ph.D. degree.
Individual Study for Doctoral Candidates: Read More [+]
Rules & Requirements

Prerequisites: One year of full-time graduate study and permission of the graduate adviser

Credit Restrictions: Course does not satisfy unit or residence requirements for doctoral degree.

Repeat rules: Course may be repeated for credit up to a total of 16 units.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer:
6 weeks - 1-10 hours of independent study per week
8 weeks - 1-8 hours of independent study per week

Additional Details

Subject/Course Level: Statistics/Graduate examination preparation

Grading: Offered for satisfactory/unsatisfactory grade only.

Individual Study for Doctoral Candidates: Read Less [-]

STAT 700 Statistics Colloquium 0.0 Units

Terms offered: Prior to 2007
The Statistics Colloquium is a forum for talks on the theory and applications of Statistics to be given to the faculty and graduate students of the Statistics Department and other interested parties.
Statistics Colloquium: Read More [+]
Hours & Format

Fall and/or spring: 15 weeks - 1-2 hours of colloquium per week

Additional Details

Subject/Course Level: Statistics/Graduate examination preparation

Grading: The grading option will be decided by the instructor when the class is offered.

Formerly known as: Statistics 999

Statistics Colloquium: Read Less [-]