CLAS C&C

Chair: Pamela Bedore

Agenda Part I 9.6.2020

WebEx Info:

https://uconnvtc.webex.com/uconnvtc/j.php?MTID=mca37eb634954c1996d8242d0a91c1350

or

Meeting number (access code): 120 876 8491

Meeting password: w33VRHWVPi4

A. Introductions & Orientation

B. Chair Approvals

2020-224	ANTH 5395	Add Special Topic: Race, Gender, and Science		
2020-225	COMM 4995	Add Special Topic: Science Communication		
2020-226	LING 6798	Add Special Topic: Syntax and Cognitive Science		
2020-227	MCB 3895	Add Special Topic: Human Disease and the Development of		
Therapeutic Agents				
2020-228	MCB 5895	Add Special Topic: Horizontal Gene Transfer		

C. New Business

C. T.C.V. Business				
2020-229	AFRA/SOCI 2250	Add Course (guest: Fumilayo Showers) (G) (S)		
2020-230	HIST 2205W	Revise Course (guest: Frank Costigliola) (G) (S)		
2020-231	BIST	Revise BIST M.A. (guest: Ming Chen)		
2020-232	BIST/STAT 5095	Revise Course (guest: Ming Chen)		
2020-233	BIST/STAT 5125	Revise Course (guest: Ming Chen)		
2020-234	BIST/STAT 5215	Revise Course (guest: Ming Chen)		
2020-235	BIST/STAT 5225	Revise Course (guest: Ming Chen)		
2020-236	BIST/STAT 5361	Revise Course (guest: Ming Chen)		
2020-237	BIST/STAT 5505	Revise Course (guest: Ming Chen)		
2020-238	BIST/STAT 5525	Revise Course (guest: Ming Chen)		
2020-239	BIST/STAT 5535	Revise Course (guest: Ming Chen)		
2020-240	BIST/STAT 5605	Revise Course (guest: Ming Chen)		
2020-241	BIST/STAT 5615	Revise Course (guest: Ming Chen)		
2020-242	BIST/STAT 5625	Revise Course (guest: Ming Chen)		
2020-243	BIST/STAT 5635	Revise Course (guest: Ming Chen)		
2020-244	BIST/STAT 5645	Revise Course (guest: Ming Chen)		
2020-245	BIST/STAT 5655	Revise Course (guest: Ming Chen)		
2020-246	BIST/STAT 5665	Revise Course (guest: Ming Chen)		
2020-247	BIST/STAT 5675	Revise Course (guest: Ming Chen)		
2020-248	BIST/STAT 5685	Revise Course (guest: Ming Chen)		
2020-249	BIST/STAT 5705	Revise Course (guest: Ming Chen)		

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2020-250
            BIST/STAT 5725
                                Revise Course (guest: Ming Chen)
                                Revise Course (guest: Ming Chen)
2020-251
            BIST/STAT 5735
                                Revise Course (guest: Ming Chen)
2020-252
            BIST/STAT 5815
2020-253
            BIST/STAT 5825
                                Revise Course (guest: Ming Chen)
                                Revise Course (guest: Ming Chen)
2020-254
            BIST/STAT 5915
                                Revise Course (guest: Ming Chen)
2020-255
            BIST/STAT 6494
2020-256
            AMST 2293
                                Add Course (S)
2020-257
            ENGL 2640/W
                                Revise Course (G) (S)
2020-258
                                Revise Course
            HIST/MAST 3544
2020-211
            GEOG/GSCI 2310E Revise Course (guest: Julie Fosdick) (G) (S)
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D. Discussion

- 1. New form from the registrar's office for adding Special Topics (feedback on Research & Experiential Courses form; do we want to continue to vet faculty proposing ST courses when not full-time faculty?)
- 2. Xx93 courses: International Study vs. Foreign Study
- 3. Committee goals for 2020/21

CATALOG COPY:

2020-229 AFRA/SOCI 2250 Add Course (guest: Fumilayo Showers) (G) (S)

Proposed Copy:

AFRA/SOCI 2250. Racial Disparities in Health

3 credits.

Social determinants of health. Racial differences in health outcomes. Social, economic, and political structures and their impacts on health organization and inequalities in care delivery. Patient-provider interactions; meanings of illness. (CA2)

Current Copy:

HIST 3205. Personality and Power in the Twentieth Century

3.00 credits

Graded

Prerequisites: None

Dynamic leadership in historical crises, including, for example, Churchill, Roosevelt, Stalin,

Hitler, DeGaulle, Kennedy, and Mao.

Proposed Copy:

HIST 2205. Personality and Power since 1900

3.00 credits

Graded

Prerequisites: None

Analysis of the links between personality and power in various countries and across different

eras. CA 1 (C)

HIST 2205. Personality and Power since 1900

3.00 credits Graded

Prerequisites: ENGL 1007 or 1010 or 1011 or 2011

2020-231 BIST Revise BIST M.A. (guest: Ming Chen)

Current Copy:

The Department of Statistics offers programs leading to a Professional Master of Science (M.S.) degree in Biostatistics (as well as Master of Science and Doctor of Philosophy (Ph.D.) degrees in Statistics, described elsewhere). The M.S. in Biostatistics requires 31 credits. Qualified full-time students are expected to complete the program in three to four semesters. The program focuses on practical skills and rigorous training in modern areas of biostatistics to solve problems in public health, health services and policy, biomedical research, and other areas such as environmental health and ecology. Students completing this program successfully will acquire

expertise in topics including statistical inference, regression analysis, design and analysis of clinical trials and epidemiological studies, bioinformatics, programming in SAS and R, data management, and consulting. Individuals with a Bachelor's degree in any major who have a background in mathematics and statistics are encouraged to apply.

Required Courses: BIST 5099, 5215, 5225; BIST 5505–5605; BIST 5515; BIST 5585–5685; BIST 5625, 5725.

Required Electives: One of the following courses: BIST 5635, 5645, or 5655. One additional course: BIST 5361, 5525, 5535, 5635, 5645, 5665, 5725, 5825 or BIST 6494 when taught as "Bayesian Data Analysis," "Bioinformatics," "Categorical Data Analysis," "Longitudinal Data Analysis," or "Environmental Statistics." The final requirement is passing the Master's Examination which is a written test on basic understanding of course materials. There is no thesis requirement.

Note: In order to be considered for a possible switch to the Ph.D. program or for financial support, a Professional M.S. in Biostatistics student must first clear the Master's Examination, and then clear the Ph.D. Qualifying Examination.

The program is offered by the College of Liberal Arts and Sciences.

Proposed Copy:

A student should take at least ten (10) 3-credit courses and the 1-credit seminar/intern course BIST 5099.

The following nine (9) courses are required:

BIST 5099. Biostatistics Practice

BIST 5505. Applied Statistics I

BIST 5605. Applied Statistics II

BIST 5585. Mathematical Statistics I

BIST 5685. Mathematical Statistics II

BIST 5215. Statistical Consulting

BIST 5225. Data Management and Programming in SAS and R

BIST 5625. Introduction to Biostatistics

BIST 5635. Clinical Trials

Two (2) elective courses should be chosen from the following courses, with one of them required to be BIST 5645 Concepts and Analysis of Survival Data, or BIST 5655 Epidemiology or BIST 5615 Categorical Data Analysis:

BIST 5615. Categorical Data Analysis

BIST 5515. Design of Experiment

BIST 5645. Concepts and Analysis of Survival Data

BIST 5655. Epidemiology

BIST 5705. Statistical Methods in Bioinformatics

BIST 5815. Longitudinal Data Analysis

Depending on how long a student plans to take to complete the Master's program, the following are recommended sequences of courses.

Three Semesters

- BIST 5505, BIST 5585, BIST 5625, BIST 5225
- BIST 5605, BIST 5635, BIST 5685, BIST 5099 or Elective
- BIST 5215, BIST 5099 or Elective, 1 Elective course

Four Semesters

- BIST 5505, BIST 5585, BIST 5625
- BIST 5605, BIST 5635, 1 Elective course
- BIST 5225, BIST 5099 or Elective, 1 Elective course
- BIST 5685, BIST 5215, BIST 5099 or Elective

2020-232 BIST/STAT 5095 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5099. Investigation of Special Topics

1.00 credit

Prerequisites: None Grading Basis: Graded Topical seminar course

Proposed Copy:

STAT 5095. Investigation of Special Topics

1.00 credit

Prerequisites: None Grading Basis: Graded Topical seminar course

2020-233 BIST/STAT 5125 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5125. Computing for Statistical Data Science

3.00 credits

Prerequisites: Introductory course in mathematical and applied statistics; introductory course in programming. Instructor consent required.

Grading Basis: Graded

Principles and practice of statistical computing in data science: data structure, data programming, data visualization, simulation, resampling methods, distributed computing, and project

management tools. Prerequisites: Introductory course in mathematical and applied statistics; introductory course in programming.

Proposed Copy:

STAT 5125. Computing for Statistical Data Science

3.00 credits

Prerequisites: Introductory course in mathematical and applied statistics; introductory course in programming. Instructor consent required..

Grading Basis: Graded

Principles and practice of statistical computing in data science: data structure, data programming, data visualization, simulation, resampling methods, distributed computing, and project management tools. Prerequisites: Introductory course in mathematical and applied statistics; introductory course in programming.

2020-234 BIST/STAT 5215 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5215. Statistical Consulting

3.00 credits

Prerequisites: STAT 5315, STAT 5505, STAT 5605 and STAT 5725, or instructor consent.

Grading Basis: Graded

Applied inference for academia, government, and industry: ethical guidelines, observational studies, surveys, clinical trials, designed experiments, data management, aspects of verbal and written communication, case studies.

Proposed Copy:

STAT/BIST 5215. Statistical Consulting

3.00 credits

Prerequisites: STAT/BIST 5315, STAT/BIST 5505, and STAT/BIST 5605, or instructor consent.

Grading Basis: Graded

Applied inference for academia, government, and industry: ethical guidelines, observational studies, surveys, clinical trials, designed experiments, data management, aspects of verbal and written communication, case studies.

2020-235 BIST/STAT 5225 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5225. Data Management and Programming in R and SAS 3.00 credits

Prerequisites: STAT 5505 and 5605, or instructor consent.

Grading Basis: Graded

Creation and management of datasets for statistical analysis: software tools and databases, user-defined functions, importing/exporting/manipulation of data, conditional and iterative

processing, generation of reports.

Proposed Copy:

STAT/BIST 5225. Data Management and Programming in R and SAS

3.00 credits

Prerequisites: STAT/BIST 5505 and STAT/BIST 5605, or instructor consent.

Grading Basis: Graded

Creation and management of datasets for statistical analysis: software tools and databases, user-defined functions, importing/exporting/manipulation of data, conditional and iterative

processing, generation of reports.

2020-236 BIST/STAT 5361 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5361. Statistical Computing

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission

Grading Basis: Graded

Use of computing for statistical problems; obtaining features of distributions, fitting models and implementing inference. Basic numerical methods, nonlinear statistical methods, numerical integration, modern simulation methods

Proposed Copy:

STAT 5361. Statistical Computing

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission

Grading Basis: Graded

Use of computing for statistical problems; obtaining features of distributions, fitting models and implementing inference. Basic numerical methods, nonlinear statistical methods, numerical integration, modern simulation methods.

2020-237 BIST/STAT 5505 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5505. Applied Statistics I

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission.

Grading Basis: Graded

Exploratory data analysis: stem-and leaf plots, Box-plots, symmetry plots, quantile plots, transformations, discrete and continuous distributions, goodness of fit tests, parametric and non-parametric inference for one sample and two sample problems, robust estimation, Monte Carlo inference, bootstrapping.

Proposed Copy:

STAT/BIST 5505. Applied Statistics I

3.00 credits

Prerequisites: Open to graduate students in Statistics and Biostatistics, others with permission.

Grading Basis: Graded

Exploratory data analysis: stem-and leaf plots, Box-plots, symmetry plots, quantile plots, transformations, discrete and continuous distributions, goodness of fit tests, parametric and non-parametric inference for one sample and two sample problems, robust estimation, Monte Carlo inference, bootstrapping.

2020-238 BIST/STAT 5525 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5525. Sampling Theory

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission

Grading Basis: Graded

Sampling and nonsampling error, bias, sampling design, simple random sampling, sampling with unequal probabilities, stratified sampling, optimum allocation, proportional allocation, ratio estimators, regression estimators, super population approaches, inference in finite populations.

Proposed Copy:

STAT 5525. Sampling Theory

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission

Grading Basis: Graded

Sampling and nonsampling error, bias, sampling design, simple random sampling, sampling with unequal probabilities, stratified sampling, optimum allocation, proportional allocation, ratio estimators, regression estimators, super population approaches, inference in finite populations.

2020-239 BIST/STAT 5535 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5535. Nonparametric Methods

3.00 credits

Prerequisites: Not open to students who have passed STAT 4875.

Grading Basis: Graded

Theory and applications of statistical methods for analyzing ordinal, non-normal data: one and multiple sample hypothesis testing, empirical distribution functions and applications, order statistics, rank tests, efficiency, linear and nonlinear regression, classification.

Proposed Copy:

STAT 5535. Nonparametric Methods

3.00 credits

Prerequisites: Not open to students who have passed STAT 4875.

Grading Basis: Graded

Theory and applications of statistical methods for analyzing ordinal, non-normal data: one and multiple sample hypothesis testing, empirical distribution functions and applications, order statistics, rank tests, efficiency, linear and nonlinear regression, classification.

2020-240 BIST/STAT 5605 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5605. Applied Statistics II

3.00 credits

Prerequisites: Prerequisite: STAT 5505

Grading Basis: Graded

Analysis of variance, regression and correlation, analysis of covariance, general linear models, robust regression procedures, and regression diagnostics.

Proposed Copy:

STAT/BIST 5605. Applied Statistics II

3.00 credits

Prerequisites: Prerequisite: STAT/BIST 5505

Grading Basis: Graded

Analysis of variance, regression and correlation, analysis of covariance, general linear models, robust regression procedures, and regression diagnostics.

2020-241 BIST/STAT 5615 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5615. Categorical Data Analysis

3.00 credits

Prerequisites: STAT/BIST 5505 and STAT/BIST 5605, or instructor consent

Grading Basis: Graded

Statistical analysis of data on a nominal scale: discrete distributions, contingency tables, odds ratios, interval estimates, the goodness of fit tests, logistic/probit/complementary log-log

regression, Poisson-related regression

Proposed Copy:

BIST 5615. Categorical Data Analysis

3.00 credits

Prerequisites: BIST 5505 and BIST 5605, or instructor consent

Grading Basis: Graded

Statistical analysis of data on a nominal scale: discrete distributions, contingency tables, odds ratios, interval estimates, goodness of fit tests, logistic/probit/complementary log-log regression,

Poisson-related regression.

2020-242 BIST/STAT 5625 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5625

3.00 credits

Grading Basis: Graded

Rates and proportions, sensitivity, specificity, two-way tables, odds ratios, relative risk, ordered and non-ordered classifications, rends, case-control studies, elements of regression including logistic and Poisson, additivity and interaction, combination of studies and meta-analysis.

Proposed Copy:

BIST 5625

3.00 credits

Prerequisites: Open to graduate students in Biostatistics, others with permission

Grading Basis: Graded

Rates and proportions, sensitivity, specificity, two-way tables, odds ratios, relative risk, ordered and non-ordered classifications, rends, case-control studies, elements of regression including logistic and Poisson, additivity and interaction, combination of studies and meta-analysis.

2020-243 BIST/STAT 5635 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5635. Clinical Trials

3.00 credits

Grading Basis: Graded

Basic concepts of clinical trial analysis; controls, randomization, blinding, surrogate endpoints, sample size calculations, sequential monitoring, side-effect evaluation and intention-to-treat analyses. Also, experimental designs including dose-response study, multicenter trials, clinical trials for drug development, stratification, and cross-over trials.

Proposed Copy:

BIST 5635. Clinical Trials

3.00 credits

Prerequisites: Open to graduate students in Biostatistics, others with permission.

Grading Basis: Graded

Basic concepts of clinical trial analysis; controls, randomization, blinding, surrogate endpoints, sample size calculations, sequential monitoring, side-effect evaluation and intention-to-treat analyses. Also, experimental designs including dose-response study, multicenter trials, clinical trials for drug development, stratification, and cross-over trials.

2020-244 BIST/STAT 5645 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5645. Concepts and Analysis of Survival Data

3.00 credits

Grading Basis: Graded

Survival models, censoring and truncation, nonparametric estimation of survival functions, comparison of treatment groups, mathematical and graphical methods for assessing goodness of fit, parametric and nonparametric regression models.

Proposed Copy:

BIST 5645. Concepts and Analysis of Survival Data

3.00 credits

Prerequisites: Open to graduate students in Biostatistics, others with permission

Grading Basis: Graded

Survival models, censoring and truncation, nonparametric estimation of survival functions, comparison of treatment groups, mathematical and graphical methods for assessing goodness of fit, parametric and nonparametric regression models.

2020-245 BIST/STAT 5655 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5655. Epidemiology

3.00 credits

Prerequisites: Open to graduate students in the Department of Statistics, others with consent.

Grading Basis: Graded

The statistical study of health and illness in human and veterinary populations: epidemiological study designs, measures of disease frequency/effect/potential impact, selection and information biases, confounding, stratified analysis.

Proposed Copy:

BIST 5655. Epidemiology

3.00 credits

Prerequisites: Open to graduate students in Biostatistics, others with consent.

Grading Basis: Graded

The statistical study of health and illness in human and veterinary populations: epidemiological study designs, measures of disease frequency/effect/potential impact, selection and information biases, confounding, stratified analysis.

2020-246 BIST/STAT 5665 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5665. Applied Multivariate Analysis

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission

Grading Basis: Graded

Multivariate normal distributions, inference about a mean vector, comparison of several multivariate means, principal components, factor analysis, canonical correlation analysis, discrimination and classification, cluster analysis.

Proposed Copy:

STAT 5665. Applied Multivariate Analysis

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission

Grading Basis: Graded

Multivariate normal distributions, inference about a mean vector, comparison of several multivariate means, principal components, factor analysis, canonical correlation analysis,

discrimination and classification, cluster analysis.

2020-247 BIST/STAT 5675 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5675. Bayesian Data Analysis

3.00 credits

Prerequisites: STAT 5585 and STAT 5685, or instructor consent.

Grading Basis: Graded

Theory of statistical inference based on Bayes' Theorem: basic probability theory, linear/nonlinear, graphical, and hierarchical models, decision theory, Bayes estimation and hypothesis testing, prior elicitation, Gibbs sampling, the Metropolis-Hastings algorithm, Monte Carlo integration.

Proposed Copy:

STAT 5675. Bayesian Data Analysis

3.00 credits

Prerequisites: STAT 5585 and STAT 5685, or instructor consent.

Grading Basis: Graded

Theory of statistical inference based on Bayes' Theorem: basic probability theory, linear/nonlinear, graphical, and hierarchical models, decision theory, Bayes estimation and hypothesis testing, prior elicitation, Gibbs sampling, the Metropolis-Hastings algorithm, Monte Carlo integration.

2020-248 BIST/STAT 5685 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5685. Mathematical Statistics II

3.00 credits

Prerequisites: Prerequisite: STAT 5585

Grading Basis: Graded

The sufficiency principle, the likelihood principle, the invariance principle, point estimation, methods of evaluating point estimators, hypotheses testing, methods of evaluating tests, interval estimation, methods of evaluating interval estimators.

Proposed Copy:

STAT/BIST 5685. Mathematical Statistics II

3.00 credits

Prerequisites: Prerequisite: STAT/BIST 5585

Grading Basis: Graded

The sufficiency principle, the likelihood principle, the invariance principle, point estimation, methods of evaluating point estimators, hypotheses testing, methods of evaluating tests, interval

estimation, methods of evaluating interval estimators.

2020-249 BIST/STAT 5705 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5705. Statistical Methods in Bioinformatics

3.00 credits

Prerequisites: STAT/BIST 5505 and STAT/BIST 5585, or instructor consent.

Grading Basis: Graded

Statistical methods and software tools for the analysis of biological data: sequencing methods; gene alignment methods; expression analysis; evolutionary models; analysis of proteomics, metabolomics, and methylation data; pathway analysis: gene network analysis.

Proposed Copy:

BIST 5705. Statistical Methods in Bioinformatics

3.00 credits

Prerequisites: BIST 5505 and BIST 5585, or instructor consent.

Grading Basis: Graded

Statistical methods and software tools for the analysis of biological data: sequencing methods; gene alignment methods; expression analysis; evolutionary models; analysis of proteomics, metabolomics, and methylation data; pathway analysis: gene network analysis.

2020-250 BIST/STAT 5725 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5725. Linear Models I

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission

Grading Basis: Graded

Linear and matrix algebra concepts, generalized inverses of matrices, multivariate normal distribution, distributions of quadratic forms in normal random vectors, least squares estimation for full rank and less than full rank linear models, estimation under linear restrictions, testing linear hypotheses.

Proposed Copy:

STAT 5725. Linear Models I

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission

Grading Basis: Graded

Linear and matrix algebra concepts, generalized inverses of matrices, multivariate normal distribution, distributions of quadratic forms in normal random vectors, least squares estimation for full rank and less than full rank linear models, estimation under linear restrictions, testing linear hypotheses.

2020-251 BIST/STAT 5735 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5735. Linear Models II

3.00 credits

Prerequisites: STAT/BIST 5725, STAT/BIST 5505, and STAT/BIST 5605. Open to students who have passed the PhD Qualifying Examination in Statistics; others with permission Grading Basis: Graded

Multiple comparisons, fixed-effects linear models, random-effects and mixed-effects models, generalized linear models, variable selections, regularization and sparsity, support vector machines, additive models, and Bayesian linear models.

Proposed Copy:

STAT 5735. Linear Models II

3.00 credits

Prerequisites: STAT 5725, STAT 5505, and STAT 5605. Open to students who have passed the

PhD Qualifying Examination in Statistics; others with permission

Grading Basis: Graded

Multiple comparisons, fixed-effects linear models, random-effects and mixed-effects models, generalized linear models, variable selections, regularization and sparsity, support vector machines, additive models, and Bayesian linear models.

2020-252 BIST/STAT 5815 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5815. Longitudinal Data Analysis

3.00 credits

Prerequisites: STAT/BIST 5505 and STAT/BIST5605, or instructor consent

Grading Basis: Graded

Statistical theory and methodology for data collected over time in a clustered manner: design of experiments, exploratory data analysis, linear models for continuous data, general linear models for discrete data, marginal and mixed models, treatment of missing data.

Proposed Copy:

BIST 5815. Longitudinal Data Analysis

3.00 credits

Prerequisites: BIST 5505 and BIST5605, or instructor consent

Grading Basis: Graded

Statistical theory and methodology for data collected over time in a clustered manner: design of experiments, exploratory data analysis, linear models for continuous data, general linear models for discrete data, marginal and mixed models, treatment of missing data.

2020-253 BIST/STAT 5825 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5825. Applied Time Series

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission

Grading Basis: Graded

Introduction to prediction using time-series regression methods with non-seasonal and seasonal data. Smoothing methods for forecasting. Modeling and forecasting using univariate autoregressive moving average models.

Proposed Copy:

STAT 5825. Applied Time Series

3.00 credits

Prerequisites: Open to graduate students in Statistics, others with permission

Grading Basis: Graded

Introduction to prediction using time-series regression methods with non-seasonal and seasonal data. Smoothing methods for forecasting. Modeling and forecasting using univariate autoregressive moving average models.

2020-254 BIST/STAT 5915 Revise Course (guest: Ming Chen)

Current Copy:

STAT/BIST 5915. Statistical Data Science in Action

3.00 credits

Prerequisites: STAT 5405 or instructor consent

Grading Basis: Graded

Real-world statistical data science practice: problem formulation; integration of statistics, computing, and domain knowledge; collaboration; communication; reproducibility; project

management.

Proposed Copy:

STAT 5915. Statistical Data Science in Action

3.00 credits

Prerequisites: STAT 5405 or instructor consent

Grading Basis: Graded

Real-world statistical data science practice: problem formulation; integration of statistics, computing, and domain knowledge; collaboration; communication; reproducibility; project

management.

2020-255 BIST/STAT 6494 Revise Course (guest: Ming Chen)

Current Copy:

BIST/STAT 6494. Seminar in Applied Statistics

1.00 - 6.00 credits | May be repeated for a total of 24 credits.

Prerequisites: Open to graduate students in Statistics, others with permission.

Grading Basis: Graded

Proposed Copy:

BIST 6494. Seminar in Biostatistics

3.00 credits May be repeated for a total of 24 credits

Prerequisites: Open to graduate students in Biostatistics, others with permission.

Grading Basis: Graded

2020-256 AMST **2293** Add Course (S)

Proposed Copy:

AMST 2993. International Study

1.00 - 9.00 credits | May be repeated for credit to a maximum of 12 credits.

Prerequisites: None. Grading Basis: Graded

Special topics taken in an international study program. Consent of department head required,

normally to be granted prior to the student's departure.

2020-257 **ENGL 2640/W Revise Course (G) (S)**

Current Copy:

ENGL 2640. Studies in Film

3.00 - 6.00 credits | May be repeated for a total of 6 credits.

Prerequisites: ENGL 1007 or 1010 or 1011 or 2011.

Grading Basis: Graded

Exploration of focused topics in film. Course content varies by section. CA 1.

ENGL 2640W. Studies in Film

3.00 - 6.00 credits | May be repeated for a total of 6 credits.

Prerequisites: ENGL 1007 or 1010 or 1011 or 2011.

Grading Basis: Graded

Proposed Copy:

ENGL 2640. Studies in Film

3.00 credits | May be repeated for a total of 6 credits. Prerequisites: ENGL 1007 or 1010 or 1011 or 2011.

Grading Basis: Graded

Exploration of focused topics in film. Course content varies by section. CA 1.

ENGL 2640W. Studies in Film

3.00 credits | May be repeated for a total of 6 credits. Prerequisites: ENGL 1007 or 1010 or 1011 or 2011.

Grading Basis: Graded

2020-258 HIST/MAST 3544 Revise Course

Current Copy:

HIST/MAST 3544. Atlantic Voyages

Three credits.

Seafaring and society since the age of Columbus. Emphasis on the Anglo-American experience.

Proposed Copy:

HIST/MAST 3544. Atlantic Voyages: European Maritime Expansion, 1400-1650.

Three credits.

Late medieval and early modern European expansion into the Atlantic and Indian oceans, with particular attention paid to European, Asian, and American contexts within which that expansion took place. Topics include technology adoption and adaptation; convergence of trade, imperial expansion and imperial identity construction; European, Asian, African, and American conditions affecting expansion; piracy and settlement; historiographical legacies and later imperialism; and decolonization of contemporary understandings.

2020-211 GEOG/GSCI 2310E Revise Course (guest: Julie Fosdick) (G) (S)

Current Copy:

GEOG 2310. National Parks Unearthed: Geology and Landscapes through Time

Also offered as: GEOG 2310

3.00 credits

Prerequisites: None. Grading Basis: Graded

Geologic processes that shape the Earth's landscapes and interior through the study of National Parks, Monuments, and Seashores. Plate tectonics, climate and biotic change, natural hazards and resources, and environmental conservation.

Proposed Copy:

GEOG 2310E. Creating and Sustaining Our National Parks

Also offered as: GEOG 2310E

3.00 credits

Prerequisites: None. Grading Basis: Graded

Geologic processes that create the Earth's iconic landscapes through the study of National Parks, Monuments, and Seashores. Plate tectonics, climate and biotic change, natural hazards, Earth materials and resources, environmental conservation, and the interactions between human society and the natural world.