Advanced Probability and Inference I Statistics 6346

Lecture: Monday, Wednesday, Friday, 10:40 - 11:30

Instructor: Eric Chicken, OSB 427 Office hours: TBA

Teaching Assistant: Haesong Choi, OSB 201B, hc18e@my.fsu.edu Office hours: Tuesday, 12:30 – 2:30; Thursday, 1:30 – 2:30

Text: There is no required text for this course. Some fine reference books include

Probability and Measure, Billingsley, 1995. *A User's Guide to Measure Theoretic Probability*, Pollard, 2002.

Goal of Course: Students will be able to use measure theoretic methods to derive and explain probabilistic identities, inequalities and theorems.

Course topics: The material covered may include, but is not limited to,

Measure spaces Measurable functions Expectation, conditional expectation Product spaces Independence Convergence, sums, limit theorems Characteristic functions Martingales

Exams: There will be four exams throughout the term on announced dates (including the final).

Homework: There will be regular homework assignments. Homework will not be collected. These assignments will reinforce lecture and prepare you for the exams.

Course Website: http://canvas.fsu.edu

Grades: Your course grade is based on the exams. Final grades are assigned based on your performance on these exams. Your grades are maintained on Canvas. There will be no extra work available to enhance your grade, so put in the appropriate effort on the assigned homework.

University Attendance Policy

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid written excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "... be honest and truthful and ... [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at http://fda.fsu.edu/Academics/Academic-Honor-Policy

Academic Success

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Dean of Students office to learn more.

Americans With Disabilities Act

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Office of Accessibility Services; and (2) request a letter from the Office of Accessibility Services to be sent to the instructor indicating the need for accommodation and what type; and (3) meet (in person, via phone, email, skype, zoom, etc...) with each instructor to whom a letter of accommodation was sent to review approved accommodations. This syllabus and other class materials are available in alternative format upon request. For the latest version of this statement and more information about services available to FSU students with disabilities, contact the: Office of Accessibility Services

874 Traditions Way 108 Student Services Building Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD) oas@fsu.edu https://dsst.fsu.edu/oas

Confidential campus resources

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

Victim Advocate Program	Counseling & Psychological Services	University Health Services
University Center A,	Askew Student Life Center,	Health and Wellness Center
Room 4100, (850) 644-7161,	2ndFloor,	(850) 644-6230
Available 24/7/365,	942 Learning Way	https://uhs.fsu.edu/
Office Hours: M-F 8-5	(850) 644-8255	
https://dsst.fsu.edu/vap	https://counseling.fsu.edu/	

Free Tutoring from FSU:

On-campus tutoring and writing assistance is available for many courses at Florida State University. For more information, visit the Academic Center for Excellence (ACE) Tutoring Services' comprehensive list of on-campus tutoring options –see http://ace.fsu.edu/tutoringor contacttutor@fsu.edu. High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

Syllabus Change Policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

FALL 2021 SUGGESTED SYLLABUS STATEMENTS FOR INSTRUCTIONAL FACULTY

Introduction

In addition to the <u>Fall Semester guidance</u> that Provost McRorie and Vice President Janet Kistner have recently offered faculty, the Faculty Senate Steering Committee has prepared the below suggested materials to assist faculty in communicating with students through their syllabi about the new mask and recording policies now in effect. We will discuss these suggested statements at our first Faculty Senate meeting on September 15, 2021, but for now, <u>we ask that you distribute them to instructional faculty in</u> your Colleges and Departments as soon as possible, while fall syllabi are under construction.

These are suggested statements, which means that faculty are free to adopt, modify, or disregard them in their own syllabi as they see fit. They are also available online at the <u>Faculty Senate Curriculum Resources</u> page and <u>Faculty Senate Resolutions</u> page. With regard to the public health protocols statement, which addresses mask policy and other public health recommendations, we emphasize that the Covid-19 situation is fast-moving, and that guidance may change at any time. For now, this provides a tool for communicating with students about Florida State University's <u>expectations</u> that everyone masks in our classrooms, even though we cannot formally require it.

With regard to the HB233 recordings policy, we offer two suggested statements, one for use in courses where recordings will be permitted of at least some portion of classes, and another for those in which recordings are categorically excluded under state law and <u>university policy</u>. Note that Vice President Kistner also provided a suggested syllabus statement in <u>earlier guidance</u> delineating when HB233 recording is and is not permissible. The language here provides additional resources for faculty to draw from in creating their syllabi. So long as courses are conducted in accordance with university policy, you may adopt your own syllabus statement, one of the statements here, the statement provided previously by the administration, some combination, or no statement at all.

We hope you find these resources useful and look forward to discussing them with you in September.

Suggested Syllabus Statements

Suggested Syllabus Statement on Public Health Protocols

In our classroom, I will expect everyone to wear a proper, well-fitting mask. As our President has informed the university community, FSU expects everyone on campus to use face-coverings. In regions where virus rates are high, the CDC recommends that even vaccinated individuals wear masks in public indoor spaces, like classrooms, especially where social distancing is not possible. Florida infection and hospitalization rates are greater now than they were at the height of the 2020 surge due to the Delta variant, a more infectious and easily transmissible version of the COVID-19 virus. The best way to protect against serious illness is to be fully vaccinated, but not everyone among us can be. Because the Delta variant can infect even vaccinated individuals and can be spread by them to others, it poses a special threat to members of the community with underlying health conditions and children at home who are too young for vaccination.

For these reasons, FSU expects each member of the community to comply with the public health protocols our President set forth on August 9, 2021, including (1) wearing masks in public indoor spaces, (2) getting fully vaccinated, (3) being tested for the virus if you have symptoms, and (4) staying home and away from others if you are sick. Please remember that you should NOT attend class in person if you have tested positive for COVID-19 or are quarantining after exposure. Finally, please bear in mind that the COVID-19 situation is fast moving and that university guidance on the issue may change at any time.

Suggested Syllabus Statement for Classes Subject to HB233 Recording

In this class, consistent with state law and university policy, students are permitted to make recordings of class lectures for personal use only. As noted, sharing, posting, or publishing classroom recordings may subject you to honor code violations and legal penalties associated with theft of intellectual property and violations of other state law. Moreover, students and educators have expressed concern that recording classroom activities may negatively impact the learning experience for others, especially in classes that involve questions, discussion, or participation. To protect a learning environment in which everyone feels free to experiment with ideas, we ask you refrain from recording in ways that could make others feel reluctant to ask questions, explore new ideas, or otherwise participate in class. Students must monitor their recording so that they do not include participation by other students without permission. Students with disabilities will continue to have appropriate accommodations for recordings as established by the Office of Accessibility Services.

Suggested Syllabus Statement for Courses Not Subject to HB233 Recording

In this class, consistent with state law and university policy, you may not make recordings of classroom activities without the permission of the instructor. This policy applies to both audio and video recordings.

Approved 10/21/2020; Counseling Center name updated 5/3/2021; Public Health Protocol, approved by Faculty Senate Steering Committee 8/11/2021