

Summer Session for Public Health Studies Summer 2020 Remote Learning Course Details

Course number	Course name	Term	Dates and Times	Credits	Grading basis	Live sessions	Options if students cannot join live sessions	Course description	Online format	Assignments and Grading	Estimated number of hours per week (including all course activities and assignments)
BST 202	Principals of Biostatistics, Part I	Summer 1	7/7/2020-7/24/2020 8:00am -9:30am	2.5	Ordinal, Pass/Fail	More detail to come		This course is the first part of introductory biostatistics and acquaints the student with the basic concepts and methods of biostatistics, their applications, and their interpretation. The material covered includes data presentation, numerical summary measures, rates and standardization, and life tables. Probability is introduced to quantify uncertainty, especially as it pertains to diagnostic and screening methods. Also covered are sampling distributions so that students may be introduced to confidence intervals and hypothesis testing. The computer is used throughout the course, and the student will gain familiarity with the software package STATA.	More detail to come	More detail to come	More detail to come
BST 203	Principals of Biostatistics, Part II	Summer 2	7/27/20-8/14/20 8:00am - 9:30am	2.5	Ordinal, Pass/Fail	We will have live sessions each day from 8am-9:30am each day. Each day we will also hold a 1.5 hour live interactive lab session that the TA holds, where we have an exercise worksheet and forms a daily office hour for homework help. These lab times are already set in the schedule, whether we end up needing both sessions will depend on enrollment.	The live lecture sessions each day will be recorded. We will also consider recording the daily interactive lab sessions run by the TA too if that may be helpful for students.	This course is the second part of introductory biostatistics; it continues to explore inference in greater depth. Lectures and laboratory exercises will emphasize applied data analysis, building upon the fundamentals emphasized in BST 202. Topics covered include the comparison of two means, analysis of variance, non-parametric methods, inference on proportions, contingency tables, multiple 2 X 2 tables, correlation, simple regression, multiple regression and logistic regression, analysis of survival data, and sampling theory. The computer is used throughout the course, and the student will gain more familiarity with STATA.	BST203 will have live sessions each day Monday-Friday from 8am to 9:39am EDT. These sessions will be held via Zoom and will consist of a lecture covering an introductory biostatistics topic. We plan to have interactive discussion and opportunities for student participation through asking questions throughout each zoom session. I will strongly recommend that students attend all classes live if possible, or to regularly watch the zoom recording as soon as possible on the same day, in order to keep up with new material. The regular daily lab session is highly recommended and forms a valuable opportunity for students to apply the methods learned in that day's class and to ask the TA for homework assistance. LIVE attendance will be required for a midterm exam and final exam (midway and last day of class). The TA and faculty will be available at other times via email for other student assistance.	There will be homework assignments assigned most days, each covering the material covered in class that day (and due late the following day). Each of the 10 homeworks will be graded out of 10 points each for a total of 20 points in final grade assessment. Each student must submit a unique homework, however, students may discuss the assignment with each other. There will be two 'inclass' exam assessments, a midterm worth 30 points and a final exam worth 50 points. These exams will be open book and open notes and timed for the class duration.	15-25 hours per week
BST 225	Introduction to Systematic Reviews and Meta-Analysis Methods	Summer 2020 Summer 2 Term	7/27/2020 to 8/14/2020, 3:45pm - 5:15pm	2.5	Ordinal or Pass/Fail	More detail to come	This course will only be available live.	Introduction to systematic reviews and meta-analysis methods are used in public health and clinical medicine. Students learn how to use a variety of formal and informal methods for identifying, evaluation, and synthesizing information from randomized controlled trials and observational studies, assessing the strength of the evidence, and translating the results into policy and practice guidelines. Concepts are introduced and illustrated through case studies of public health or clinical topic of their choosing. Intermediate results will be presented and discussed in class.	More detail to come	More detail to come	More detail to come
EPI 202S	Epidemiologic methods 2: Elements of Epidemiologic Research	Summer 2020 Summer 2 Term	7/7/20-7/24/20 9:45 - 11:15 (Optional extra 60 minute session daily time TBD)	2.5	Ordinal or Pass/Fail	Live synchronous sessions conducted over zoom weekdays from 9:45AM- 11:15AM EDT. Optional live interactive one-hour sessions will be conducted by the Teaching Fellow every weekday to review problem sets, homework assignments, review course material and answer general questions (time TBA).	Live sessions will be recorded and posted to the course website.	Introduces elements of study design, data analysis and causal inference in epidemiologic research. Principles and methods are illustrated with examples, and reviewed through homework and in-class exercises. May serve as an introduction to more advanced study or as a concluding course for those desiring a working knowledge of epidemiologic methods. EPI 202 extends the concepts of study design, data analysis, and inference introduced in the introductory epidemiology courses. An optional lab session is held daily - time TBA.	Live synchronous sessions every weekday (9:45AM-11:15AM EDT) conducted over Zoom. These sessions will consist of a lecture on the core topic of the day, supplemented with class discussion including interactive questions/activities. It is strongly recommended that students join the live sessions whenever possible, but the sessions will be recorded and posted on the course website. In addition to the live lectures, there are several pre-recorded modules that will be posted on the Canvas site for students to review on their own. The Teaching Fellow will hold 60-minute live sessions over Zoom every weekday (time TBA). During these sessions, the Teaching Fellow will answer questions regarding the problem sets, homework assignments and be available to review any aspect of the course material.	Problem Sets (10%): There are 6 short problem sets to be completed on the Canvas site. Students can work together and discuss the problem sets with each other. Students will receive full credit for completing the problem sets on time, but they will not be graded. Answer keys will be distributed on the course website and the Teaching Fellow will be available to review the problem sets during the optional sessions. Homework (25%): There are 3 homework assignments including one study critique (8/3/20) and 2 data analysis exercises (8/10/20 and 8/13/20). Students are encouraged to work together on the homework assignments and can ask questions about them during the optional Teaching Fellow session. Each student must submit his/her own homework assignment in their own words. The Teaching Fellow will grade the Homework and provide individual written feedback. Exams (Midterm 30% and Final 35%): The midterm (8/5/20) and final exam (8/14/20) will be completed on the Canvas site. Students will have a 12-hour window to complete each exam, but once the exam is opened, it must be completed within 90 minutes. Students will sign an academic integrity agreement before beginning each exam.	15-20 hours per week
EPI 500	Fundamentals of Epidemiology	Summer 1 2020	7/7/20-7/24/2020 Every day from 9:45-11:15 am	2.5	Ordinal & Pass/Fail	Synchronous sessions conducted over zoom every day from 9:45AM-11:15AM EDT. Lectures are complemented by weekly 2-hour seminars, and devoted to case studies, exercises, or critique of current examples of epidemiologic studies. Teaching Fellows will hold sessions to review case studies, exercises, homework and all related material	Live sessions and office hours will be recorded and posted to the course website.	The purpose of this class is to introduce the basic principles and methods of epidemiology and demonstrate their applicability in the fields of public health and medicine. At the end of the course the students will be able to do the following: 1. Critically interpret medical and public health literature 2. Evaluate the risk associated with public health and epidemiologic issues 3. Design and analyze an observational study on a public health or medical topic 4. Design and analyze an experimental study on a public health or medical topic	EPI 500 will involve live daily synchronous sessions (9:45AM-11:15 AM EDT) conducted over Zoom. These sessions will consist of a lecture on basic principles and methods of epidemiology and demonstration of their applicability in the fields of public health and medicine. Lectures will be accompanied with small group exercises and interactive seminars. It is strongly recommended that students join the live sessions whenever possible, but the sessions will be recorded and posted on the course website. Students will work in small groups in Zoom breakout rooms along with the Teaching Fellows to evaluate the risk associated with public health threats using epidemiologic studies in a defined topic area. The seminars include leading an inclass discussion emphasizing key points and relevant questions. There will be also three small group exercises and the details of the will be provided in each class. Optional group and individual office hours will be offered by faculty and Teaching Fellows at a variety of times (TBA). There also will be a discussion board on the course website, for students to ask questions and interact with each other and with faculty and Teaching Fellows.	Homework and class participation in seminars (20%): Homeworks involve preparing brief written assignments of the design of epidemiologic studies. There will be three homework assignments. Required format: short paper with study design. The due dates of the homework will be given in class. Students must individually write their own answers to the homework assignments but are encouraged to work together in groups to discuss the homework readings. Each student must submit his/her own homework assignment in their own words. Midterm exam (30%) and Final exam (50%): There will be two in-class examinations, one mid-term and one final examination. The questions will be on concepts from the reading assignments and small groups exercises (33%) and on concepts discussed in class and presented during lectures (67%). The format will be discussed in class.	15-20 hours per week
GHP 532	Introduction to Global Health Care Delivery	Summer 2020 (instructor permission required for registration)	7/7-7/24/20 11:30a to 1p	2.5	Ordinal and P/F	We will have live sessions everyday. Course will be taught through lectures and online case discussions	all sessions will be recorded and available for viewing	GHP 532 seeks to engage students in analysis of case studies that describe interventions to improve health care delivery in resource-poor settings. On-line discussion of these case studies will help illuminate principles and frameworks for the design of effective global health interventions. Through a focus on HIV, tuberculosis, malaria, and other health conditions these cases will allow students to carefully consider the question of how epidemiology, pathophysiology, culture, economics, and politics inform the design and performance of global health programs.	Almost all the course will be taught live. Students will have the opportunity to view recorded sessions after they occurred.	Assignments: Daily readings. A take-home essay-based final exam. Evaluations: Final exam 50%, Class and small group participation 50%	2-3 hours a night/12-15 hours a week

GHP213	Global cardiovascular disease prevention – methods, study designs and case studies	Summer 2020 Summer 1 term	7/7/20-7/26/2020 8:00-9:30 am	2.5	Ordinal or Pass/Fail	Synchronous live class sessions via Zoom at 8:00 to 9:30 each weekday; Weekly office hours at a variety of times	Recordings of live sessions; Weekly office hours; Discussion board on course web site	At the end of the course, attendees will be able to use analytical methods (regression models, survival analysis) to examine the causal impact of interventions on preventing cardiovascular diseases (CVD); they will also be able to critically appraise the literature on CVD prevention worldwide and to design and evaluate interventions to prevent CVD. They will also be able to discuss cases of success and failure in CVD prevention worldwide with a focus on low and middle-income countries.	GHP 213 will have synchronous (i.e., live) sessions every weekday from 8:00-9:30 am EDT. These sessions will be held via Zoom. We will use the first half hour of each session for a peer-led discussion on a topic that is not discussed in the lectures. The next one hour will consist of a lecture on a particular topic. It is strongly recommended that students join the live sessions whenever possible, but they will be recorded and posted afterwards on the course website if students are unable to join live. For some lectures, pre-record materials will be uploaded on course website before the class. Students are expected to be familiar with the "Pre-record" materials before attending the class. Power point slides will be uploaded on the course website before the class.	Evaluation: Class activities which is the peer-led discussion at the first half hour of each session (15%); homework assignments (30%); research proposal (40%); class participation (15%)	15-25 hours/week
HPM 530	Measuring and Analyzing the Outcomes of Health Care - Instructors - Marcia Testa and Donald Simonson	Summer 2020 Summer 1 Term	7/7/20-7/24/20 2:00 - 3:30	2.5	Ordinal or Pass/Fail	Synchronous live class sessions at assigned time each day; optional office hours at a variety of times. Recorded live session available on demand.	The live sessions will be recorded and posted on the course website.	Course presents introductory-level content for measuring and analyzing patients' health status, quality of life, satisfaction and cost-effectiveness for health outcomes research for: 1) Demonstrating improvement in outcomes; 2) Controlling costs and allocating resources; 3) Implementing disease management programs and 4) Making effective public health, health technology and clinical decisions. Statistical methods to evaluate and use scales are presented. The course is geared to public health and clinical researchers who must critically review and utilize outcomes data for public health, health care and clinical decision-making. The course should enable students to: 1) Conceptually define the meaning and purpose of health outcomes research; 2) Understand the role of epidemiology, health economics and database and information technology; 3) Evaluate the usefulness and utility of health outcomes measures; 4) Recognize the different types of measures used in outcomes research, including clinical, health status, quality-of-life, work/role performance, health care utilization, and patient satisfaction; 5) Adopt new methods for modeling patient responses, interpret the meaning of measurement concepts and obtain a basic appreciation of the statistical analyses appropriate for outcomes research; 6) Locate available research-quality instruments for measuring health care outcomes in order to make informed choices among existing instruments and 7) Interpret the results of health outcomes research Notes: <i>An introductory statistics course recommended, but not required.</i>	HPM 530 will offer synchronous live sessions every weekday from 2:00 - 3:30 EDT. These sessions will be held via Zoom and each session will be broken into a several short lectures modules with multi-media and interactive polling to provide for mixed-media fluently and class discussion. While similar to the goal of live classroom sessions, the format will optimize technology to ensure that students are actively engaged. This format will require students to attend the live sessions, and use their video camera whenever possible. The final class sessions will require students to give a brief live presentation to their classmates with an additional question and answer session. Office hours will be offered at a variety of times including evenings and weekends if necessary to accommodate the intensive daily scheduling of other summer session courses. There also will be a discussion board on the course website, for students to ask questions and interact with each other and with faculty.	There will be three written homework assignments and one brief oral presentation (10 minutes). The written Homework Assignments are meant to serve as both a review and self evaluation of the lectures and reading materials as well as a chance to practice hands-on skills. As such, each written Assignment consists of two parts 1) Knowledge Component and a Practice Component. While the first part assesses knowledge obtained from the material, the second part requires hands-on application and integration of the material into research and practice. The submissions will be graded by the instructors, but the primary goal is to have the student review the material to be able to apply methods to research and practice. The project resulting in an oral presentation focuses on applying skills on a topic of interest to the student. Course grade = weighted average of oral presentation score (20%), homework 1 (20%), homework 2 (20%), homework 3 (20%) and class participation as assessed by class attendance, and the quality of in-class and online participation (20%).	12-15/hours/week
ID 215	Occupational and Environmental Epidemiology	Summer 2020 (Full Summer) Summer 1 Term	7/7/2020-7/24/2020 3:45-5:15	2.5	Ordinal or Pass/Fail	3-45-5:15 on weekdays (strongly recommended); optional office hours as needed	Recordings of live sessions	This course examines application of epidemiologic methods to environmental and occupational health problems. Objectives are to review methods used in evaluating the health effects of physical and chemical agents in the environment, to review available evidence on the health effects of such exposures, and to consider policy questions raised by the scientific evidence. Topics include lectures on methodology, seminars on the review and criticism of current literature, and presentations by outside experts on specific environmental and occupational health issues of current interest.	ID 215 will have synchronous (i.e., live) sessions every weekday from 3:45-5:15pm EDT. These sessions will be held via Zoom and usually will consist of a lecture on a specific topic in environmental/occupational epi, interspersed with discussion and/or other interactive activities. It is strongly recommended that students join the live sessions whenever possible, but they will be recorded and posted afterwards on the course website if students are unable to join live. In person LIVE attendance is REQUIRED on the first two days of class (July 7 and July 8), the final class (July 24, for the exam), and on the day each student selects to lead the class discussion. Optional group and individual office hours will be offered by faculty and Teaching Fellows at a variety of times.	There will be four homework assignments, each of which will count for 100 points each and will all follow the same format. Each student must submit a unique homework, however, students may discuss the assignment with each other. On the final day of class (July 24), there will be a final exam, consisting of short-answer questions about the lectures, worth 500 points. Finally, each student will sign up to lead the discussion on the assigned reading, for a total of 100 points.	12-15 hours/week
NUT 217	Global Nutrition	Summer 2	7/27/20-8/14/20 2:00-3:30pm	2.5	Ordinal, Pass/Fail, Audit	2:00-3:30pm on weekdays; optional office hours	Recordings of live sessions; discussion board on course website	NUT 217 is an introductory-level course that covers the role of undernutrition and overnutrition in the global context. The specific course objectives are to enable students to: understand the role of nutrition in health and human development in resource-poor and developed settings; apply the acquired knowledge in clinical care, field programs, and research; critically review scientific literature and program experience on nutrition in relation to prevention, care, and treatment and draw appropriate conclusions; and use the knowledge obtained for a career of learning in nutrition	EN 208 will have live sessions every weekday from 2:00-3:30 EDT. These sessions will be held via Zoom and usually will consist of a lecture on a particular topic, including methods of assessing nutrition status and then topic-based classes like nutrition and infection, physical activity and chronic disease and planetary health and nutrition. On the last day of class (August 14) there will be student presentations of their final projects. Dr. Suffield and the Teaching Assistant will hold office hours on Zoom.	The course will be graded on (1) advisory memo, (2) critique of recent nutrition article, and (3) Final project - NUT 217 Grand Challenges application based on a nutritional intervention of the students choice which will include a presentation on the last day of the course. If the student is not able to make the class period for the presentation, the student will present to Dr. Suffield and the TA at a different time.	10 hours/ week