

## DEPARTMENT OF EPIDEMIOLOGY

## SCHOOL OF PUBLIC HEALTH

## SCHEDULE OF COURSES: SPRING 2020

[Note: PRE-requisites must be met prior to beginning course; CO-requisites can be taken concurrently]

COURSE#	SECTION#	TITLE	DESCRIPTION	PRE- OR CO-REQUISITES	FACULTY	DAY(S)	TIME(S)	REGISTRATION
						[T=Tues]		COMMENTS
						[R=Thurs]		
600	001	PRINCIPLES OF EPIDEMIOLOGY (3 credits) <b>Must register for one lab section: sections 601-604 (see below)</b>	An introductory course that considers the meaning and scope of epidemiology and the uses of morbidity, mortality, and other vital statistics data in the scientific appraisal of community health.		Yeatts	T	3:30-4:45	Registration for non-SPH majors will open the first week of classes IF space is available.
600	601, 602	PRINCIPLES OF EPIDEMIOLOGY <b>*LAB*</b>	See above		See above	W	3:35-4:50	
600	603, 604	PRINCIPLES OF EPIDEMIOLOGY <b>*LAB*</b>	See above		See above	R	3:30-4:45	
626	001	VIOLENCE AS A PUBLIC HEALTH PROBLEM (cross-listed as MHCH 626/HBEH 626; administering department: EPID) (3 credits)	This course covers core concepts in violence prevention and control, including the epidemiology of violence, prevention strategies for inter-personal and intra-personal violence, behavioral models that describe power structures that reinforce personal and societal factors affecting self-harm and violence towards others, and violence directed towards children and adolescents.	*PRE*-requisite: EPID 625	Shanahan, Marshall	TR	12:30 -- 1:45	
701	001	R for Epidemiologists	This course is intended to be the most effective and efficient way for UNC Epidemiology students to establish a foundation in the R programming language, RStudio IDE, and functional programming modalities. Special attention is given to R topics and packages relevant for epidemiological data management, analysis, and visualization.	EPID majors or permission of instructor for non majors.	Fliss, Marshall	TR	9:30-10:45	
715	001	THEORY AND QUANTITATIVE METHODS IN EPIDEMIOLOGY (4 credits)	An in-depth treatment of key methodological topics in epidemiologic research, including problem conceptualization, study design, research conduct, data analysis and interpretation.	*PRE*-requisite: EPID 705, EPID 710 or 711 & EPID 700 or equivalents CO-requisites: BIOS 545 & EPID 716 Priority for EPID majors and EPID minors.	Poole	MW	9:05- 11:00	Non-EPID minors should contact EPID Student Services (epidemiology@unc.edu)

## DEPARTMENT OF EPIDEMIOLOGY

## SCHOOL OF PUBLIC HEALTH

## SCHEDULE OF COURSES: SPRING 2020

[Note: PRE-requisites must be met prior to beginning course; CO-requisites can be taken concurrently]

COURSE#	SECTION#	TITLE	DESCRIPTION	PRE- OR CO-REQUISITES	FACULTY	DAY(S)	TIME(S)	REGISTRATION
						[T=Tues]		COMMENTS
						[R=Thurs]		
716	001	EPIDEMIOLOGIC DATA ANALYSIS (3 credits) <b>Must register for one lab section: Sections 601-603 (see below)</b>	This course is a combined lecture/lab format where students get hands-on experience in the analysis and interpretation of data from cohort and case-control studies.	*PRE*-requisite: EPID 710 or 711, & EPID 700 or equivalents	Avery	M	11:15-12:30	Registration for this course opens at approximately 9:00AM on Nov 6 to allow equal access to recitation sections.
716	601	EPIDEMIOLOGIC DATA ANALYSIS - COMPUTER LAB	See above		Avery	W	12:20-1:35	
716	602	EPIDEMIOLOGIC DATA ANALYSIS - COMPUTER LAB	See above		Avery	W	12:20-1:35	
716	603	EPIDEMIOLOGIC DATA ANALYSIS - COMPUTER LAB	See above		Avery	R	9:30-10:45	
719	001	READINGS IN EPIDEMIOLOGIC METHODS (1 credit)	A discussion in journal-club format of readings in general epidemiologic methods, from problem conceptualization to application of results.		Poole	F	11:15-12:05	
722	001	EPIDEMIOLOGIC ANALYSIS OF TIME-TO- EVENT DATA (4 credits)	Course covers epidemiologic analysis of time-to-event data and emphasizes weighing threats to the accuracy of inferences. Class time is spent discussing weekly readings and homework.	*PRE*-requisites: EPID 718 & SAS software expertise; CO-requisite: EPID 722 (601); Permission required for non-majors.	Cole	TR	3:30-4:45	Requires enrollment in recitation section 601
722	601	EPIDEMIOLOGIC ANALYSIS OF TIME-TO- EVENT DATA *LAB*	<u>Required recitation for EPID 722</u>	*PRE*-requisites: EPID 718 & SAS software expertise; CO-requisite: EPID 722 (001); Permission required for non-majors.	Cole	M	1:25-2:15	
726	001	EPIDEMIOLOGIC RESEARCH METHODS (3 credits)	A second level course on conduct of epidemiologic research. Focuses on dealing with both the conceptual problems of applying the scientific method and practical issues encountered in carrying out the work.	*PRE*-requisites: EPID 715/6, EPID 725, at least 1 (preferably 2) substantive EPID course(s), and second year PhD student in EPID.	Pettifor	TR	11:00-12:15	

## DEPARTMENT OF EPIDEMIOLOGY

## SCHOOL OF PUBLIC HEALTH

## SCHEDULE OF COURSES: SPRING 2020

[Note: PRE-requisites must be met prior to beginning course; CO-requisites can be taken concurrently]

COURSE#	SECTION#	TITLE	DESCRIPTION	PRE- OR CO-REQUISITES	FACULTY	DAY(S)	TIME(S)	REGISTRATION
						[T=Tues]		COMMENTS
						[R=Thurs]		
738A	001	METHODS AND APPLICATIONS OF CARDIOVASCULAR DISEASE SURVEILLANCE (1 credit)	This course helps students gain experience critiquing and interpreting national and international cardiovascular disease (CVD) surveillance programs, evaluate recommendations for future CVD surveillance research and policy, and to explore CVD surveillance data sources with hands-on experience with practical aspects of study conduct.	*PRE*-requisite: EPID 735 or instructor permission. Permission required for non-majors.	Rosamond	W	1:25-3:05	Course meets 1/8/20 thu 2/26/20
738B	001	EPIDEMIOLOGY OF STROKE (1 credit)	This course helps students become familiar with physiologic and pathologic aspects of cerebrovascular diseases, provides opportunity to explore research findings regarding major risk factors for stroke and evidence for prevention strategies, and offers a guided experience in critiquing, synthesizing, and communicating stroke related research findings.	*PRE*-requisite: EPID 735 or instructor permission. Permission required for non-majors.	Rosamond	W	1:25-3:05	Course meets 3/4/20 thru 4/22/20
743	001	GENETIC EPIDEMIOLOGY: METHODS AND APPLICATIONS (3 credits)	Concepts and methods of genetic epidemiology relevant to the study of complex human diseases, including research on twins, familial aggregation, path analysis, segregation analysis, linkage analysis, and gene-environment interaction.	*CO*-requisites: EPID 715 & BIOS 545	North	TR	2:00-3:15	
755	001	INTRODUCTION TO INFECTIOUS DISEASE EPIDEMIOLOGY (3 credits)	Objectives of Course: (1) understand the general principles of infectious disease epidemiology; (2) understand surveillance, prevention and control of infectious diseases; (3) apply principles to specific infectious diseases.	*PRE*-requisite: EPID 751 or 799A module  Permission required for non-majors.	Powers	TR	2:00-3:15	
759	01W, 965, 968	METHODS IN FIELD EPIDEMIOLOGY (3 credits)	Course will focus on epidemiological methods required to investigate urgent public health problems. Course covers the skills and tools needed to conduct outbreak investigations and communicate findings to the public.	*PRE*-requisite: EPID 600. This course is part of the Field Epi Certificate Program. Special permission is required for degree-seeking students.	Yeatts, Alexander	Web-based	N/A	Contact Lorraine Alexander (lorraine_alexander@unc.edu) for permission.

## DEPARTMENT OF EPIDEMIOLOGY

## SCHOOL OF PUBLIC HEALTH

## SCHEDULE OF COURSES: SPRING 2020

[Note: PRE-requisites must be met prior to beginning course; CO-requisites can be taken concurrently]

COURSE#	SECTION#	TITLE	DESCRIPTION	PRE- OR CO-REQUISITES	FACULTY	DAY(S)	TIME(S)	REGISTRATION
						[T=Tues]		COMMENTS
						[R=Thurs]		
760	001	VACCINE EPIDEMIOLOGY (3 credits)	This course will include an overview of vaccinology principals, mechanisms of action, and herd protection. Students will obtain an in-depth understanding of how vaccines are produced by industry and evaluated in clinical trials. For public health programs, implementation of immunization programs will also be covered, including the Advisory Committee on Immunization Practices and how to best optimize population acceptability of vaccination.		Smith	M	3:35-6:35	
764	001	HOSPITAL EPIDEMIOLOGY (2 credits)	Comprehensive seminar in hospital infection control. Topics include issues in employee health, surveillance, outbreak investigation, environmental samplings and policy formation.	CO-requisite: EPID 600 or equivalent	Weber, Vavalle	T	8:00-9:50	You must select TWO credits when enrolling
771	001	CANCER EPIDEMIOLOGY: SURVIVORSHIP AND OUTCOMES (3 credits)	Students will evaluate the strengths and weaknesses of data sources common to cancer survivorship and outcomes studies, focusing on epidemiologic study designs. The course addresses cancer detection, treatment strategies, medical surveillance, and personal behaviors as determinants for prognosis, late effects, and the long-term health of cancer survivors.	PRE-requisites: EPID 710 or 711	Nichols	TR	9:30-10:45	
785	001	ENVIRONMENTAL EPIDEMIOLOGY (3 credits)	Methods for evaluating the health consequences of environmental and occupational hazards are presented. Topics include exposure assessment, disease surveillance, sources of bias, environmental injustice, and research collaborations with exposed populations. Three lecture hours per week.	*PRE*-requisites: EPID 710 & BIOS 600	Engel, L	MW	9:05-10:20	

## DEPARTMENT OF EPIDEMIOLOGY

## SCHOOL OF PUBLIC HEALTH

## SCHEDULE OF COURSES: SPRING 2020

[Note: PRE-requisites must be met prior to beginning course; CO-requisites can be taken concurrently]

COURSE#	SECTION#	TITLE	DESCRIPTION	PRE- OR CO-REQUISITES	FACULTY	DAY(S)	TIME(S)	REGISTRATION
						[T=Tues]		COMMENTS
						[R=Thurs]		
799A	001	SPECIAL STUDIES IN EPIDEMIOLOGY I	Experimental course to be offered by faculty to determine the need and demand for the subject. Topics will be chosen by faculty based on current public health issues. One credit option.	EPID majors only	Heiss	TBD	TBD	<b>1st Year Doctoral Seminar</b> All 1st year doctoral students are encouraged to register
804	001	DESIGN OF CLINICAL RESEARCH (4 credits)	This course is designed for students interested in a career in clinical research. The course will focus on the design of clinical studies, excluding traditional clinical trials, essential for a clinical researcher.	*PRE*-requisite: EPID 711 or equivalent. Permission of instructor required if not in MSCR program.	Baron	T R	2:00-4:15 2:00-3:15	
813	001	NUTRITIONAL EPIDEMIOLOGY (cross-listed with NUTR 813; administering department: NUTR) (3 credits)	This course focuses on exposure measurement and builds the foundation for critical evaluation of the nutritional epidemiologic literature.	*PRE*-requisites: EPID 600 & BIOS 600 or equivalents.	Meyer	M	2:00-5:00	
827	001	SOCIAL EPIDEMIOLOGY: ANALYSIS & INTERPRETATION (3 credits)	Approaches to social epidemiologic data and application/interpretation of various analytic methods. Topics include multilevel models, econometric and psychometric techniques, and issues in causal inference.	*PRE*-requisites: EPID 715 & BIOS 545	Robinson	R	12:30-2:20	
853	001	ADVANCED PERINATAL/PEDIATRIC EPIDEMIOLOGY (2 credits)	Critical review of current topics in, and methods for, perinatal and pediatric epidemiology.	*PRE*-requisites: EPID 710 & EPID 851	Engel, S.	F	11:15-1:10	
886	001	PROBLEMS IN EPIDEMIOLOGY: INDEPENDENT STUDY (1 or more credits, depending on scope of planned work)	A course for students who wish to make an intensive study of some special problems in epidemiology. Reserved for students making independent study arrangements with individual instructors.	Permission of instructor required	Per arrangement with faculty			Go to Student Services Office (MC2106) to register
889	001	TOPICS IN EPIDEMIOLOGY: Topic: TBD (1 credit)	Course will review major national and international cardiovascular disease surveillance studies with special focus on methods of case ascertainment and validation. Students will gain experience critiquing and interpreting surveillance studies. Recommendations for the future of surveillance of cardiovascular disease research and policy will be evaluated.	*PRE*-requisite: EPID 710 or permission of instructor	North, Young, Graff	M	12:20-3:20	Functional Annotation of Genetic Data  Meets 1/27/20 thru 2/17/20

## DEPARTMENT OF EPIDEMIOLOGY

## SCHOOL OF PUBLIC HEALTH

## SCHEDULE OF COURSES: SPRING 2020

[Note: PRE-requisites must be met prior to beginning course; CO-requisites can be taken concurrently]

COURSE#	SECTION#	TITLE	DESCRIPTION	PRE- OR CO-REQUISITES	FACULTY	DAY(S)	TIME(S)	REGISTRATION
						[T=Tues]		COMMENTS
						[R=Thurs]		
893	001	PHARMACOEPIDEMOLOGY SEMINAR (1 credit)	This is a weekly seminar to explore current problems in pharmacoepidemiology. It supplements the introductory course Epidemiology 765.		Jonsson-Funk	M	3:35-4:25	
894	001	INFECTIOUS DISEASE SEMINAR (1 credit)	Detailed review of selected topics in infectious disease epidemiology.	*PRE*-requisite: ID epi student taking substantive QE in Fall 2019. Permission of instructor required.	Pence	T	9:30-10:20	
897	001	ADVANCED SEMINAR IN CARDIOVASCULAR RESEARCH (1 credit)	Intended to expose students to novel, ongoing research in CVD epidemiology. The focus is methodologic as well as topical.	Permission of instructor required	Heiss	T	12:30-1:20	Obtain permission from Dr. Heiss and have him send an email to epidemiology@unc.edu authorizing enrollment
900	001	EPIDEMIOLOGY PRACTICE (4 credits)	Designed to give epidemiology majors a supervised field experience in population health research.	Permission of instructor required	Alexander	TBA	TBA	
910	001 and others	RESEARCH IN EPIDEMIOLOGY (1-9 credits)	Independent investigation in consultation with an instructor who must assign or approve the subject of research. Credits will vary according to the effort and rigor of the research.	Permission of instructor required	Various faculty	TBA	TBA	Register in the section assigned to the specific instructor (see campus schedule). Use section 001 if instructor does not have own section (must be done through EPID registrar's office)
992	001 and others	MASTER'S PAPER (3 credits)	<b>DO NOT ENROLL WITHOUT YOUR ADVISOR'S APPROVAL.</b>	Permission of instructor required, but you can register yourself.	Various faculty	TBA	TBA	
994	001 and others	DOCTORAL DISSERTATION (3 credits)	<b>DO NOT ENROLL WITHOUT YOUR ADVISOR'S APPROVAL.</b>	Permission of instructor required, but you can register yourself.	Various faculty	TBA	TBA	