

EPIDEMIOLOGY (EPIDEMIOLOG)

EPIDEMIOLOG 140.07 Preventive Medicine & Public Health (6-12 Units)

Instructor(s): George Rutherford

Prerequisite(s): Fourth-year medical student standing.

Restrictions: None

This course is a practicum in public health and preventive medicine as practiced in state and local public health departments in the Bay Area and at the Centers for Disease Control and Prevention. Activities include community-based disease control, surveillance, environmental health, outbreak investigations, health education, etc., and can be tailored to students interests.

School: Medicine

Department: Epidemiology And Biostatistics

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: No

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? No

Repeat course for credit? No

EPIDEMIOLOG 140.08 Clerkship in Human and Veterinary Disease Ecology (6 Units)

Instructor(s): George Rutherford

Prerequisite(s): Fourth-year standing; EPIDEMIOLOG 140.02 or 140.07 or similar prior experience in public health practice.

Restrictions: Must show proof of current pre-exposure rabies vaccination and/or recent protective titer.

Full-time course in infectious disease ecology based in the Veterinary Public Health and Vector-borne Diseases Sections of the California Department of Health Services. One medical student and one UCD veterinary student will conduct outbreak and field investigations, help to develop public health policy statements and review surveillance data regarding zoonotic and vector-borne diseases of public health significance in California.

School: Medicine

Department: Epidemiology And Biostatistics

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: No

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? No

Repeat course for credit? No

EPIDEMIOLOG 150.03 Designing Clinical Research (One Month) (2 Units)

Instructor(s): Megie Okumura

Prerequisite(s): Possession of at least an undergraduate degree or enrollment in the UCSF Pre-Health Undergraduate Program (PUP) or SF-BUILD program. An idea for a clinical research question that has been discussed with a research mentor. Proficiency with word processing software, biomedical literature searching, and reference management software. Exceptions to prerequisites may be made with Course Director consent.

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

This online course guides residents and students through the essential components for writing a clinical research protocol, developed around their own clinical research question. Students attend lectures and small group seminars as well as being given the opportunity for an optional peer review session in the last week of the course. The course will cover research questions, hypotheses, specific aims, study types, sample size estimation, power calculations, and data analysis.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? No

Repeat course for credit? No

EPIDEMIOLOG 180.08 Violence Prevention and Trauma-Informed Care (1 Units)

Instructor(s): Leigh Kimberg

Prerequisite(s): None

Restrictions: None

Introduction to violence causes, consequences and solutions. Emphasis on health professional's role in the clinic and community. Special consideration of domestic and sexual violence, child abuse, guns, gangs, media, drugs and alcohol, and the justice system.

School: Medicine

Department: Epidemiology And Biostatistics

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: No

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 198 Supervised Study (1-6 Units)

Instructor(s): Staff

Prerequisite(s): Consent of instructor

Restrictions: None

Library research and directed reading under supervision of a member of the faculty.

School: Medicine

Department: Epidemiology And Biostatistics

May the student choose the instructor for this course? Yes

Does enrollment in this course require instructor approval? Yes

Graduate Division course: No

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? Yes

EPIDEMIOLOG 201 Responsible Conduct of Research (0.5 Units)

Instructor(s): Elaine Ku

Prerequisite(s): None

Restrictions: None

Instruction in identifying and resolving common ethical dilemmas that arise in clinical research, how research is regulated, and misconduct in research. This course meets the NIH requirement for training in research ethics.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 202 Designing Clinical Research (Two Month) (2 Units)

Instructor(s): Mark Pletcher

Prerequisite(s): Possession of a graduate or professional doctoral degree (MD, PhD, DDS, PharmD, or international equivalent), currently enrolled in an undergraduate, graduate, or professional school, or relevant work experience. An idea for a clinical research question that has been discussed with an experienced investigator. Proficiency with word processing software, biomedical literature searching, and reference management software. Exceptions to prerequisites may be made with Course Director consent.

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

A workshop for students to design their own protocol for carrying out a clinical research project. Specific topics are: the research question, study designs, study subjects, measurements, sample size, ethical considerations, presets, data management, quality control, and proposal writing.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)
enroll in this course? Yes

Repeat course for credit? Yes

EPIDEMIOL 203 Epidemiologic Methods (3-4 Units)

Instructor(s): Jennifer Smith, Catie Oldenburg, Erin Van Blarigan
Prerequisite(s): Designing Clinical Research (EPI 202), or equivalent experience, and Introduction to Statistical Computing in Clinical Research (BIOSTAT 212), or equivalent experience. Exceptions to these prerequisites may be made with the consent of the Course Director, space permitting.

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

An introductory course to the theory and methods of epidemiology, including an overview of the measures of disease occurrence in populations, measures of association between exposures and outcomes, major study designs used in epidemiology, and major sources of bias in epidemiologic studies. It aims to develop participants skills in the critical evaluation of epidemiologic studies, and will provide the foundation for more advanced methods in study design, causal inference, and biostatistics.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOL 204 Clinical Epidemiology (3 Units)

Instructor(s): Michael Kohn, Thomas Newman
Prerequisite(s): Epidemiology 202. Exceptions to these prerequisites may be made with the consent of the Course Director, space permitting.

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

This is primarily a course about diagnosis and prediction. In public health and clinical practice, diagnostic tests estimate the probability of a prevalent disease, and risk prediction models evaluate the likelihood of an incident outcome. The course will cover: performance measures used for diagnostic tests and risk prediction models; design and critical appraisal of research studies to evaluate tests and risk models; and using the results of tests and risk models.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOL 205 Clinical Trials (2 Units)

Instructor(s): Alison Huang, Patrick Phillips
Prerequisite(s): Designing Clinical Research (EPI 202). Exceptions to these prerequisites may be made with the consent of the Course Director, space permitting.

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

Instruction in experimental design options in clinical research; methods of randomization; blinding; interventions and controls; measuring outcomes and adverse effects; follow-up, compliance and post-randomization problems; ethical issues; and working with pharmaceutical companies.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOL 207 Epidemiologic Methods II (3 Units)

Instructor(s): June Chan, Rebecca Graff
Prerequisite(s): Epidemiologic Methods (EPI 203), or equivalent, and Biostatistical Methods for Clinical Research I (BIOSTAT 200), or equivalent experience, are required. Experience with the Stata software program is also required. Exceptions to these prerequisites may be made with the consent of the Course Director, space permitting.

Restrictions: This course is part of the Training in Clinical Research (TICR) and Epidemiology and Translational Science PhD Programs and may have space limitations. Auditing is not permitted.

This course is designed to provide masters and doctoral students in Epidemiology with advanced training in the theory and practice of epidemiology. It focuses on integrating study design methods with advanced causal inference approaches. The lectures focus on practical and theoretical considerations of the observational study designs. The small group discussion meetings will cover examples and applications of the concepts and analytic approaches introduced in the lectures.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? Yes

EPIDEMIOLOG 210 Epidemiology of Aging (2 Units)*Instructor(s):* Jacqueline Torres

Prerequisite(s): none

Restrictions: This course is appropriate for any graduate student, fellow or post doc in a health or social sciences discipline who is interested in the topic.

This course will provide an overview of issues and methods for the study of the epidemiology of aging with a focus on common chronic diseases in older populations. Students will learn how epidemiologic methods can be applied to aging populations with emphasis on translational applications. Researchers in a topic will present their work. A combination of lectures and seminar formats will be used. Students will complete a 10 page paper, present their work in class and participate in discussion.

School: Graduate Division**Department:** Clinical Research Program**May the student choose the instructor for this course?** No**Does enrollment in this course require instructor approval?** No**Graduate Division course:** Yes**Is this a web-based online course?** No**Is this an Interprofessional Education (IPE) course?** No**May students in the Graduate Division (i.e. pursuing Master or PhD)****enroll in this course?** Yes**Repeat course for credit?** No**EPIDEMIOLOG 212 Publishing and Presenting Clinical Research (1-1.5 Units)***Instructor(s):* Vinayak Prasad

Prerequisite(s): None

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

This course will provide instruction in preparing manuscripts for publication in the medical literature including how to prepare title and abstract; introduction and methods; results and discussion.

School: Graduate Division**Department:** Clinical Research Program**May the student choose the instructor for this course?** No**Does enrollment in this course require instructor approval?** No**Graduate Division course:** Yes**Is this a web-based online course?** No**Is this an Interprofessional Education (IPE) course?** No**May students in the Graduate Division (i.e. pursuing Master or PhD)****enroll in this course?** Yes**Repeat course for credit?** No**EPIDEMIOLOG 213 Cost-Effectiveness Analysis in Medicine and Public Health (2 Units)***Instructor(s):* Tracy Lin

Prerequisite(s): None

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

This course builds from basic portrayal of decision problems, to more inclusive and sophisticated methods. Section activities parallel the lectures; assignments include both programmed exercises on current topics and development of student's own decision analysis and cost effectiveness analysis.

School: Graduate Division**Department:** Clinical Research Program**May the student choose the instructor for this course?** No**Does enrollment in this course require instructor approval?** No**Graduate Division course:** Yes**Is this a web-based online course?** No**Is this an Interprofessional Education (IPE) course?** No**May students in the Graduate Division (i.e. pursuing Master or PhD)****enroll in this course?** Yes**Repeat course for credit?** No**EPIDEMIOLOG 217 Molecular & Genetics Epidemiology I (2 Units)***Instructor(s):* Thomas Hoffmann

Prerequisite(s): Epi 180.04 & possession of MD, PhD, DDS or PharmD or equivalent degree. Exceptions to these prerequisites may be made with the consent of the course director, space permitting.

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

This course introduces the concepts, principles, & use of molecular and genetic methods in epidemiologic and clinical research. Students will develop a framework for interpreting, assessing & incorporating such measures in their area of research. In particular, students will learn about: common molecular measures available; including such measures into clinical research; and interactions between genes & other exposures.

School: Graduate Division**Department:** Clinical Research Program**May the student choose the instructor for this course?** No**Does enrollment in this course require instructor approval?** No**Graduate Division course:** Yes**Is this a web-based online course?** No**Is this an Interprofessional Education (IPE) course?** No**May students in the Graduate Division (i.e. pursuing Master or PhD)****enroll in this course?** No**Repeat course for credit?** No

EPIDEMIOLOG 218 Data Collection and Management for Clinical Research (1 Units)

Instructor(s): Michael Kohn
Prerequisite(s): None.

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

Instruction in data collection and management for clinical research, including the relational database model, data collection forms, reports, and exports to statistical packages. Specific applications include REDCap and Microsoft Access with the option of exporting to Stata or R. Build SQL statements using the Access query design tool.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? Yes

EPIDEMIOLOG 220 Master's Seminar I (1 Units)

Instructor(s): Lydia Zablotzka

Prerequisite(s): Possession of MD, PhD, DDS or PharmD degree or permission of course director and Epidemiology 180.04.

Restrictions: This course is restricted to those enrolled in the Master's degree program in Clinical Research.

This series of seminars, beginning in fall and spread over three terms, provides a forum for presenting scholar's projects and for evaluating controversies in clinical research..

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? Yes

EPIDEMIOLOG 221 Master's Seminar II (1 Units)

Instructor(s): Jeffrey Martin, Thomas Newman, Michael Kohn

Prerequisite(s): Possession of MD, PhD, DDS or PharmD degree or permission of course director and Epidemiology 180.04, 220.

Restrictions: This course is restricted to those enrolled in the Master's degree program in Clinical Research.

These seminars provide a forum for presenting scholar's projects, and for evaluating controversies in clinical research.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? Yes

EPIDEMIOLOG 222 Social Determinants of Health and Health Disparities (1-2 Units)

Instructor(s): Christine Dehlendorf

Prerequisite(s): EPIDEMIOLOG 202. Exceptions may be made with the consent of the Course Director, space permitting.

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

The 1 unit course will consist of the first five lectures, covering conceptual and methodological material relevant to many researcher doing work with diverse populations, including multilevel determinants of health and measurement of race/ethnicity and socioeconomic status. The 2 unit course will include the first five lectures, and an additional five lectures over 5 weeks covering more advanced material related to the conduct of health disparities research for those specifically interested i

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 226 Informatics Tools for Health Disparities Research (2 Units)

Instructor(s): William Brown

Prerequisite(s): Students without coding knowledge will be guided to UCSF library learning resources.

Restrictions: None

This course is for learners interested in accessing data sources and using informatics tools that are helpful in identifying cohorts, developing research questions, and conducting health disparities research. Topics will include finding, managing, manipulating, mining, and analyzing a variety of data types. Lectures will cover informatics research projects that address health disparities. Learners will gain access to tools and data sources, and there will be hands-on activities.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? Yes

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 230 APCR Seminar (1 Units)

Instructor(s): Lydia Zablotska

Prerequisite(s): Possession of MD, PhD, DDS or PharmD degree or permission of course director and Epidemiology 180.04.

Restrictions: Restricted to students in the Advanced Training in Clinical Research (ACR) Certificate Program.

Trainees enrolled in the ACR program present and critique each others' clinical research projects on an on-going basis throughout the year.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? No

Repeat course for credit? No

EPIDEMIOLOG 231 Use of Electronic Health Records Data for Clinical Research (3 Units)

Instructor(s): Anobel Odisho

Prerequisite(s): EPIDEMIOLOG 218 and BIOSTAT 212. Exceptions to these prerequisites may be made with the consent of the Course Director, space permitting.

Restrictions: This course is part of the Training in Clinical Research (TICR) Program and may have space limitations. Auditing is not permitted.

This course introduces students to concepts, methods, and pitfalls related to the extraction and analysis of data from the Electronic Health Record. The course covers common EHR data structures and vocabularies, using that knowledge to inform clinical study design, and creation of patient cohorts and analytic extracts. We will evaluate both ambulatory and inpatient use cases. The course will pair lectures with labs to allow application of lecture material.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 232 Introduction to Clinical Informatics (2 Units)

Instructor(s): Raman Khanna, William Brown

Prerequisite(s): None

Restrictions: None

The course will provide an overview of clinical informatics (the application of informatics to deliver health care services), with an emphasis on clinical informatics research and maintaining scientific rigor in implementation, measurement, evaluation, and health equity. Topics will include electronic health records, clinical decision support, data standards and systems, human factors engineering, clinical informatics policy, and the application of artificial intelligence in clinical informatics

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 241 Designs for Intervention Research in Real-World Settings (2 Units)

Instructor(s): Margaret Handley, Starley Shade

Prerequisite(s): Familiarity with conventional individual-level study design (e.g., observational and experimental designs).

Restrictions: This course is part of the UCSF Implementation Science Training Program and the Training in Clinical Research (TICR) Program. It may have space limitations. Auditing is not permitted. In addition, enrollment is not permitted if cross-listed course IMS 24_ or IMS 24_A (online version) has been taken and passed.

Instruction in the design of studies that are alternatives to individual participant-level randomization for the evaluation of interventions in real-world settings. Both randomized (e.g., cluster-randomized and stepped-wedge randomized trials) and quasi-experimental design (e.g., pre-post and interrupted time series) will be discussed.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 242 Program Evaluation in Clinical and Public Health Settings (2 Units)

Instructor(s): Janet Myers

Prerequisite(s): None

Restrictions: Enrollment is not permitted if the cross-listed course IMS 242 or IMS 242A have been taken and passed.

This course provides training in evaluating a health program or strategy implemented in a clinical or public health setting. Scholars will develop an evaluation plan that uses logic models and evaluation frameworks (e.g., RE-AIM) to guide the systematic collection of information to understand if and how a program/implementation strategy is meeting its stated goals and objectives; improve program/implementation strategy effectiveness; and/or make decisions about future programming.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 243 Human Centered Design (2 Units)

Instructor(s): Meghana Gadgil

Prerequisite(s): Training or experience in public health, quality improvement, or health care organization leadership. Exceptions for these prerequisites may be made with the consent of the course director.

Restrictions: Enrollment is not permitted if the cross-listed course IMS 243 or EPI 243 have been taken and passed.

Human-centered design is a discipline incorporating the human needs perspective to solve problems in public health and medicine. As an introduction to the practice, learners will follow a service design process applying methods focused on building empathy, translating needs into solution requirements, creative ideation, prototype development and testing, and planning for implementation. Broad implementation science principles and approaches will be overlaid to show intersection points.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 245 Introduction to Implementation Science: Theory and Design (2 Units)

Instructor(s): Adithya Cattamanchi, Andrew Kerkhoff

Prerequisite(s): Training or experience in clinical research, public health, quality improvement or health care organization leadership. Exceptions for these prerequisites may be made with the consent of the course director.

Restrictions: The course cannot be repeated for credit - students who take and pass IMS 245 or EPI 245 are not permitted to take this course.

This course provides a foundation for designing and evaluating strategies to accelerate the translation of evidence into practice, policy, and public health. Concepts introduced include community engagement, behavior change theory, and implementation strategy design and evaluation frameworks, and study design. In addition to didactic work, scholars are guided through the creation of a protocol aimed towards facilitating uptake of their chosen health intervention. Cross-listed as IMS 245.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 246 Designing Individual-Level Implementation Strategies (2 Units)

Instructor(s): Matthew Spinelli, Emilia Demarchis

Prerequisite(s): Training or experience in clinical research, public health, quality improvement or health care organization leadership. Exceptions for these prerequisites may be made with the consent of the course director.

Restrictions: The course cannot be repeated for credit - students who take and pass Implementation Science (IMS) 246 are not permitted to take this course.

Provides training in developing interventions targeting individual health behavior change, while focusing on intervention design components that target multiple determinants: individual, interpersonal and system/community/structural level. Students use principles of behavior change theories and implementation frameworks applied to their work to solidify course concepts. Additional assignments involve case studies analysis and online discussions with other students. Cross-listed with IMS 246.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? Yes

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 247 Designing Interventions to Change Organizational Behavior (2 Units)

Instructor(s): Laura Schmidt

Prerequisite(s): Experience working/volunteering within an organization. Ideally, this will be a healthcare organization you work in now or if not, then in the past.

Restrictions: This course is part of the UCSF Implementation Science Training Program and the Training in Clinical Research (TICR) Program. It may have space limitations. Auditing is not permitted. In addition, enrollment is not permitted if cross-listed course IMS 24X or IMS 24XA (online version) has been taken and passed.

This course surveys a range of translational tools at the health care system level that you can use to promote the adoption of evidence-based medicine by providers and delivery systems. Learn strategies for change in the broader context of sociological theories of organizational behavior and policy implementation. Focus your learning on translational tools that can be used by stakeholders outside of health care organizations to promote the adoption of clinical innovations within organizations.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 248 Community-Engaged Research (2 Units)

Instructor(s): Sara Ackerman

Prerequisite(s): Training or experience in public health, quality improvement or health care organization leadership. Exceptions for these prerequisites may be made with the consent of the course director.

Restrictions: Enrollment is not permitted if cross-listed course IMS 248 has been taken and passed.

This course provides training in the theory and practice of collaborating with patients, members of the public, and community-based organizations in health research, intervention design and implementation. Multiple engagement strategies are introduced through readings, guest speakers, case studies, and online discussions. Participatory research methods will be applied to trainees' ongoing or planned projects in order to adapt health interventions to real-world contexts. Cross-listed as IMS 248.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 249 Translating Evidence Into Policy (2 Units)

Instructor(s): Beth Griffiths

Prerequisite(s): The course is focused on domestic (US) health policy and requires a basic understanding of government organizational structures (executive, legislative and judicial branches).

Restrictions: This course is part of the UCSF Implementation Science Training Program and the Training in Clinical Research (TICR) Program. It may have space limitations. Auditing is not permitted. In addition, enrollment is not permitted if cross-listed course IMS 249 or IMS 249A (online version) has been taken and passed.

This course will focus on the policy process and strategies for collecting and disseminating research findings to inform and influence that process. The course will be taught through a series of videos and guided readings delivered by faculty with extensive experience at the federal, state, and local level in health care policy.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 252A Cancer Epidemiology (2 Units)

Instructor(s): Robert Hiatt, Lydia Zablotska, George Sawaya, Thea Tlsty, Erin Van Blarigan, Scarlett Gomez, Karla Kerlikowske, Rebecca Graff
Prerequisite(s): EPI 203 (Epidemiologic Methods I) or equivalent.
 Students are also encouraged to take EPI 217 or Berkeley course 256 Genetic Epidemiology (or equivalent experience).

Restrictions: None.

This course is intended for students who already have acquired, or concurrently are acquiring a basic understanding of the principles and methods of epidemiology, and who now wish to apply this knowledge to the study of the epidemiology of neoplastic diseases. Enrollment will be limited to 15 students. This is a 2 part course that extends over to the spring quarter, beginning with EPI 252A, followed by EPI 252B.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 252B Cancer Epidemiology (1 Units)

Instructor(s): Robert Hiatt, George Sawaya, Thea Tlsty, Lydia Zablotska, Karla Kerlikowske, Scarlett Gomez, Erin Van Blarigan, Rebecca Graff
Prerequisite(s): EPIDEMIOLOG 252A.

Restrictions: Student must have been enrolled EPI 252A

This course is intended for students who already have acquired, or concurrently are acquiring a basic understanding of the principles and methods of epidemiology, and who now wish to apply this knowledge to the study of the epidemiology of neoplastic diseases. Enrollment will be limited to 15 students. This is a 2-part course that extends over to the spring quarter, beginning with EPI 252A, followed by EPI 252B.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 253 Methods in Infectious Disease Epidemiology (2-3 Units)

Instructor(s): Ali Mirzazadeh, George Rutherford

Prerequisite(s): Students will need to have an understanding of basic epidemiological and statistical methods as covered in Epi203 (Epidemiologic Methods I) and Bio200 (Biostatistical Methods for Clinical Research I). Familiarity with an analysis software package is non-essential but encouraged in particular in those who choose "analysis data of an infectious disease" as their project.

Restrictions: None

This course will focus on the epidemiological methods used in infectious disease, and strategies for their control or elimination. The faculty-facilitated seminars will focus on key readings in the field and will be led by students. The course covers concepts and methods to assess transmissions, pharmaceutical and non-pharmaceutical control measures, outbreak investigation, and one health approach to fight health issues at the human-animal-environment interface, including zoonotic diseases.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 258A NIH F & K Grant Writing Workshop (Online) (3 Units)

Instructor(s): Erin Van Blarigan, Amy Conroy

Prerequisite(s): None

Restrictions: This course is designed for doctoral level students or higher. A brief application will be available at the course website.

This course is designed to provide doctoral students and fellows with training on the preparation of a NIH Fellowship or Career Development Award application in a structured environment. The course will cover funding mechanisms, NIH submission and review procedures, charting out a timeline for writing and assembling all grant components, and writing each component of the grant application.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? Yes

Graduate Division course: Yes

Is this a web-based online course? Yes

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? Yes

EPIDEMIOLOG 258B NIH F & K Grant Writing Workshop (3 Units)

Instructor(s): Erin Van Blarigan

Prerequisite(s): This course is designed for Master's level students.

Additional learners can enroll with instructor approval.

Restrictions: Designed for TICR program students

This course is designed to provide training on the preparation of a NIH Fellowship or Career Development Award application in a structured environment. The course will cover funding mechanisms, NIH submission and review procedures, charting out a timeline for writing and assembling all grant components, and writing each component of the grant application.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? Yes

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 263 Demographic Methods for Health (1.5 Units)

Instructor(s): Nadia Diamond-Smith

Prerequisite(s): None

Restrictions: None

This course will cover basic demographic theory and methods, including population dynamics, fertility, mortality, migration, urbanization, aging, and family structure. The emphasis will be on how and why understanding these factors is important for public health practitioners. This will be accomplished through case studies on public health topics and how understanding certain demographic phenomenon is essential for understanding the disease burden.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 265 Research Methods in Chronic Disease Epidemiology (2-3 Units)

Instructor(s): Catie Oldenburg

Prerequisite(s): EPIDEMIOLOG 203\BIOSTAT 200

Restrictions: This course assumes a basic foundation in epidemiology and quantitative research methods. Concurrent enrollment or previous completion of a regression course is strongly recommended.

This course will focus on clearly articulating and testing research hypotheses related to the determinants and consequences of chronic conditions. Each session will introduce specific methodological concepts for epidemiologic studies, organized around an illustrative applied research paper. The course will emphasize causal inference from observational data. Most examples will be drawn from literature on social and lifecourse determinants of dementia, stroke, and cardiometabolic disease.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 266 Mathematical Modeling of Infectious Diseases (1.5 Units)

Instructor(s): Travis Porco

Prerequisite(s): Introductory probability or statistics. Exceptions to these prerequisites may be made with the consent of the Course Director, space permitting.

Restrictions: None

Introduction to Concepts of mathematical modeling of infectious diseases; topics include branching processes and the basic reproduction number, dynamical systems, and methods for data fitting Including MCMC.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOL 267 Qualitative and Mixed Methods Research (2 Units)

Instructor(s): Sara Ackerman, Kim Koester

Prerequisite(s): Training or experience in public health, epidemiology, clinical research, quality improvement or health care organization leadership. Exceptions for these prerequisites may be made with the consent of the course director.

Restrictions: Intended for students in the MAS or APCR programs. Space permitting, individuals not enrolled in MAS/APCR may take this course. Enrollment is not permitted if IMS 250 (online version) has been taken and passed.

This course provides training in the use of qualitative and mixed methods in clinical, health services and implementation research. Through readings, lectures, case studies, and online discussions, students will gain basic skills in conducting interviews, focus groups, and observations, qualitative and mixed methods data analysis, and innovative approaches such as rapid ethnography and joint display of qualitative and quantitative findings.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOL 268 Econometric Methods for Causal Inference (2-3 Units)

Instructor(s): Justin White

Prerequisite(s): Biostat 200, Biostat 208, Epi 203, or equivalent experience. Experience with Stata. Open to students from any department or program.

Restrictions: None

Epidemiologists and clinical researchers are increasingly seeking to estimate the causal effects of health-related policies, programs, and interventions. Economists have long had similar interests, and have developed and refined methods to estimate causal relationships. Examples include difference-in-differences, instrumental variables, and regression discontinuity. This course introduces this set of econometric tools and research designs in the context of health-related questions.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOL 269 Equity Issues in Reproductive Health (2 Units)

Instructor(s): Patience Afulani, Nadia Diamond-Smith

Prerequisite(s): Knowledge of introductory biostatistics, basic understanding of study design

Restrictions: None

This is a graduate-level course focused on Reproductive, Maternal, Neonatal and Child Health (RMNCH). The course will cover foundational RMNCH concepts, including providing an overview of selected RMNCH issues in the US and globally, highlighting best practices and innovations in measurement in RMNCH, examining ways in which social determinants influence RMNCH and produce health inequities and evaluating approaches to meet the needs of vulnerable populations.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? Yes

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOL 270 Doctoral Seminar in Epidemiology and Translational Science (1-2 Units)

Instructor(s): Catie Oldenburg, Dave Glidden

Prerequisite(s): None

Restrictions: This seminar is only offered to graduate students in Epidemiology and Translational Science.

This seminar is for doctoral students enrolled in the PhD Program in Epidemiology and Translational Science. The seminar is a forum for instruction and discussion of scholarly topics related to advanced study of epidemiology and its applications as well as works in progress by the graduate students.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 296 Independent Study in Epidemiology and Translational Science (1-4 Units)

Instructor(s): Staff

Prerequisite(s): EPI 203 - Epidemiologic Methods
EPI 207 - Epidemiologic Methods II
Biostat 200 - Biostatistical Methods
Biostat 208 - Biostatistical Methods II
Biostat 209 - Biostatistical Methods III

Restrictions: Prerequisites or equivalent training approved by the instructor is required.

Independent Study in Epidemiology and Translational Science provides opportunities for pre-doctoral students to work with individual faculty on topics tailored to the special interest of the student with individualized readings, learning materials and experiential learning.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? Yes

Does enrollment in this course require instructor approval? Yes

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 297 Research Rotation in Epidemiology & Translational Science (1-4 Units)

Instructor(s): Staff

Prerequisite(s): EPI 203 - Epidemiologic Methods
EPI 207 - Epidemiologic Methods II
Biostat 200 - Biostatistical Methods
Biostat 208 - Biostatistical Methods II
Biostat 209 - Biostatistical Methods III

Restrictions: Prerequisites or equivalent training approved by the instructor are required.

Two Research (Team) Rotations of one quarter each are required for the PhD degree in Epidemiology and Translational Science. The purpose is to expose the student to every day working environments for epidemiologists to expand their view of the scope of the discipline. The content of a Rotation can be primarily analytic working with an existing dataset or nonanalytic working on the development and implementation of a research project.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? Yes

Does enrollment in this course require instructor approval? Yes

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOLOG 299 MAS Dissertation Requirements Only (0 Units)

Instructor(s): Alexis Beatty, Elaine Ku

Prerequisite(s): Advancement to candidacy in the MAS in Clinical Research program and the permission of the graduate program advisor.

Restrictions: For students in the MAS in Clinical Research program only.

For graduate students in the MAS in Clinical Research Program who have successfully completed all required coursework and are in the process of writing their three products required for graduation.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? No

Repeat course for credit? No

EPIDEMIOLOG 299D Dissertation Research (8 Units)

Instructor(s): Catie Oldenburg

Prerequisite(s): Must have passed PhD Qualifying Examination

Restrictions: Must have passed PhD Qualifying Examination

EPI 299D Dissertation Research is required of students working on their dissertations following passing their qualifying examinations. The subject matter depends on the topic of the dissertation.

School: Graduate Division

Department: Epidemiology And Translational Sciences Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? Yes

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes

Repeat course for credit? No

EPIDEMIOL 300 Clinical Research Educational Practice (2 Units)

Instructor(s): Elaine Ku, Alexis Beatty, Catie Oldenburg, Dave Glidden

Prerequisite(s): Students must have taken the assigned course previously.

Restrictions: This course is part of the Master's in Clinical and Epidemiological Research program degree requirements.

Students in the Masters in Clinical and Epidemiological Research program are required to gain instructional experience (typically in their second year) in one course within the TICS Program. This experience may involve leading a weekly small-group discussion section (10-12 students), holding office hours for students and grading homework assignments and projects. Satisfactory completion of this requirement is required for advancement to degree completion.

School: Graduate Division

Department: Clinical Research Program

May the student choose the instructor for this course? No

Does enrollment in this course require instructor approval? No

Graduate Division course: Yes

Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? No

Repeat course for credit? No