

# EPIDEMIOLOGY (EPIDEMIOL)

## EPIDEMIOL 140.07 Public Health & General Preventive Medicine (6-12 Units)

Offered In: Fall, Winter, Spring, Summer

*Instructor(s):* Rosalyn Plotzker

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

**Restrictions:** None

**Activities:** Seminar, Clinical

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

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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

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

Offered In: Fall, Winter, Spring, Summer

*Instructor(s):* Rosalyn Plotzker

**Prerequisite(s):** Fourth-year standing; EPIDEMIOL 140.02 or EPIDEMIOL 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.

**Activities:** Fieldwork, Conference

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

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)

Offered In: Fall, Summer

*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.

**Activities:** Web work, Discussion

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)

Offered In: Fall

*Instructor(s):* Leigh Kimberg

**Prerequisite(s):** None

**Restrictions:** None

**Activities:** Lecture

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

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)

Offered In: Fall, Winter, Spring, Summer

*Instructor(s):* Staff

**Prerequisite(s):** Consent of instructor

**Restrictions:** None

**Activities:** Independent Study, Project

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

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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

## EPIDEMIOL 201 Responsible Conduct of Research (0.5 Units)

Offered In: Fall, Spring

*Instructor(s):* Sara Ackerman

**Prerequisite(s):** None

**Restrictions:** None

**Activities:** Lecture

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

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

Offered In: Summer

*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.

**Activities:** Lecture, Discussion

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 203 Epidemiologic Methods (3-4 Units)

Offered In: Fall

*Instructor(s):* Jennifer Smith, Catie Oldenburg, Erin Van Blarigan

**Prerequisite(s):** EPIDEMIOLOG 202, or equivalent experience, and 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.

**Activities:** Lecture, Discussion

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 204 Clinical Epidemiology (3 Units)

Offered In: Fall

*Instructor(s):* Michael Kohn, Thomas Newman

**Prerequisite(s):** EPIDEMIOLOG 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.

**Activities:** Lecture, Discussion

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)**

Offered In: Winter

*Instructor(s):* Alison Huang, Patrick Phillips**Prerequisite(s):** EPIDEMIOL 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.**Activities:** Workshop, Discussion

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 and Epidemiological Research Program**May the student choose the instructor for this course?** No**Does enrollment in this course require instructor approval?** No**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)**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)**

Offered In: Winter

*Instructor(s):* June Chan, Rebecca Graff**Prerequisite(s):** EPIDEMIOL 203, or equivalent, and 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.**Activities:** Lecture, Web work, Discussion

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 and Epidemiological Research Program**May the student choose the instructor for this course?** No**Does enrollment in this course require instructor approval?** No**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)**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 210 Epidemiology of Aging (2 Units)

Offered In: Fall

*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.

**Activities:** Lecture, Project

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 213 Cost-Effectiveness Analysis in Medicine and Public Health (2 Units)

Offered In: Winter

*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.

**Activities:** Lecture

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 217 Molecular & Genetics Epidemiology I (2 Units)

Offered In: Winter

*Instructor(s):* Thomas Hoffmann

**Prerequisite(s):** EPIDEMIOL 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.

**Activities:** Lecture

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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

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

Offered In: Summer

*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.

**Activities:** Lecture, Lab skills

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 220 Master's Seminar I (1 Units)

Offered In: Fall, Winter, Spring

*Instructor(s):* Lydia Zablotska

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

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

**Activities:** Seminar

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)**

Offered In: Fall, Winter, Spring

*Instructor(s):* Jeffrey Martin, Thomas Newman, Michael Kohn**Prerequisite(s):** Possession of MD, PhD, DDS or PharmD degree or permission of course director and EPIDEMIOLOG 180.04, EPIDEMIOLOG 220.**Restrictions:** This course is restricted to those enrolled in the Master's degree program in Clinical Research.**Activities:** Seminar

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

**School:** Graduate Division**Department:** Clinical and Epidemiological Research Program**May the student choose the instructor for this course?** No**Does enrollment in this course require instructor approval?** No**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)**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)**

Offered In: Winter

*Instructor(s):* Christine Dehlendorf, Meghan Morris**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.**Activities:** Lecture

An introduction to the knowledge and skills needed to conduct high-quality research in diverse human populations with an emphasis on understanding the measurement and influence of race/ethnicity and socioeconomic status on health.

**School:** Graduate Division**Department:** Clinical and Epidemiological Research Program**May the student choose the instructor for this course?** No**Does enrollment in this course require instructor approval?** No**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)**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)**

Offered In: Winter

*Instructor(s):* William Brown**Prerequisite(s):** Students without coding knowledge will be guided to UCSF library learning resources.**Restrictions:** None**Activities:** Lecture

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**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)**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 ATCR Seminar (1 Units)**

Offered In: Fall, Winter, Spring

*Instructor(s):* Lydia Zablotska**Prerequisite(s):** Possession of MD, PhD, DDS or PharmD degree or permission of course director and EPIDEMIOLOG 180.04.**Restrictions:** Restricted to students in the Advanced Training in Clinical Research (ATCR) Certificate Program.**Activities:** Seminar

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

**School:** Graduate Division**Department:** Clinical and Epidemiological Research Program**May the student choose the instructor for this course?** No**Does enrollment in this course require instructor approval?** No**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)**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



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

Offered In: Winter

*Instructor(s):* Anobel Odisho

**Prerequisite(s):** EPIDEMIOL 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.

**Activities:** Lecture, Lab skills

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 232 Introduction to Clinical Informatics (2 Units)

Offered In: Summer

*Instructor(s):* Raman Khanna, William Brown

**Prerequisite(s):** None

**Restrictions:** None

**Activities:** Lecture, Project

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 233 Artificial Intelligence in Clinical Informatics (2 Units)

Offered In: Spring

*Instructor(s):* Leo Liu

**Prerequisite(s):** None

**Restrictions:** None

**Activities:** Lecture, Project, Lab science

The course will provide an overview of artificial intelligence (AI), with a particular emphasis on clinical informatics applications and considerations. Topics covered will include research, maintaining scientific rigor in clinical informatics AI design decisions, evaluation, interpretability, privacy, and fairness/bias.

**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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

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

Offered In: Spring

*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 IMPLMT SCI 241 or IMS 24\_A (online version) has been taken and passed.

**Activities:** Lecture

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)

Offered In: Fall

*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 IMPLMT SCI 243 or EPIDEMIOLOG 243 have been taken and passed.

**Activities:** Lecture

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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

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

Offered In: Fall, Spring

*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 IMPLMT SCI 245 or EPIDEMIOL 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 IMPLMT SCI 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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

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

Offered In: Spring

*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 IMPLMT SCI 247 has been taken and passed.

**Activities:** Lecture, Project

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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

## EPIDEMIOLOGICAL 248 Community-Engaged Research (2 Units)

Offered In: Fall

*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 IMPLMT SCI 248 has been taken and passed.

**Activities:** Project

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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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

## EPIDEMIOLOGICAL 249 Translating Evidence Into Policy (2 Units)

Offered In: Spring

*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 IMPLMT SCI 249 has been taken and passed.

**Activities:** Lecture, Project

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 252A Cancer Epidemiology (2 Units)**

Offered In: Winter

*Instructor(s):* Robert Hiatt, Lydia Zablotska, George Sawaya, Thea Tlsty, Erin Van Blarigan, Scarlett Gomez, Karla Kerlikowske, Rebecca Graff

**Prerequisite(s):** EPIDEMIOL 203 or equivalent. Students are also encouraged to take EPIDEMIOL 217 or Berkeley course 256 Genetic Epidemiology (or equivalent experience).

**Restrictions:** Enrollment will be limited to 15 students.

**Activities:** Seminar

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. This is a 2-part course that extends over to the spring quarter, beginning with EPIDEMIOL 252A, followed by EPIDEMIOL 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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory), In Progress (IP, SP/UP) grading allowed

**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 252B Cancer Epidemiology (1 Units)**

Offered In: Spring

*Instructor(s):* Robert Hiatt, George Sawaya, Thea Tlsty, Lydia Zablotska, Karla Kerlikowske, Scarlett Gomez, Erin Van Blarigan, Rebecca Graff

**Prerequisite(s):** EPIDEMIOL 252A

**Restrictions:** Enrollment will be limited to 15 students. Student must have been enrolled EPIDEMIOL 252A

**Activities:** Seminar

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. This is a 2-part course that extends over to the spring quarter, beginning with EPIDEMIOL 252A, followed by EPIDEMIOL 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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)

Offered In: Spring

*Instructor(s):* Ali Mirzazadeh, George Rutherford

**Prerequisite(s):** Students will need to have an understanding of basic epidemiological and statistical methods as covered in EPIDEMIOLOG 203 and BIOSTAT 200. 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

**Activities:** Lecture, Seminar, Project

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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)

Offered In: Winter

*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.

**Activities:** Lecture, Independent Study

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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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

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

Offered In: Spring

*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

**Activities:** Lecture, Project, Workshop

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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** Yes

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 263 Demographic Methods for Health (1.5 Units)

Offered In: Fall

*Instructor(s):* Nadia Diamond-Smith

**Prerequisite(s):** None

**Restrictions:** None

**Activities:** Lecture

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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 Advanced Epidemiologic Methods: Application & Interpretation (3 Units)**

Offered In: Spring

*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.

**Activities:** Lecture, Project

This course will focus on advanced analytic methods for causal inference and the interpretation of epidemiologic studies for decision making for individual and population health. The course will emphasize causal inference from observational data, and include a focus on data generation processes, specific methodological concepts for epidemiologic studies, and interpretation of data. Examples will draw from diverse fields within epidemiology, including social epidemiology and infectious 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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)**

Offered In: Spring

*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

**Activities:** Lecture

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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)

Offered In: Winter

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

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

**Restrictions:** None

**Activities:** Lecture, Independent Study

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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)

Offered In: Fall, Winter, Spring

*Instructor(s):* Catie Oldenburg, Dave Glidden

**Prerequisite(s):** None

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

**Activities:** Seminar

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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

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

Offered In: Fall, Winter, Spring, Summer

*Instructor(s):* Staff

**Prerequisite(s):** EPIDEMIOL 203, EPIDEMIOL 207, BIostat 200, BIostat 208, BIostat 209

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

**Activities:** Independent Study

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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

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

Offered In: Fall, Winter, Spring, Summer

*Instructor(s):* Staff

**Prerequisite(s):** EPIDEMIOL 203, EPIDEMIOL 207, BIostat 200, BIostat 208, BIostat 209

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

**Activities:** Project

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

**Course Grading Convention:** Letter Grade, P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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 299 MAS Dissertation Requirements Only (0 Units)

Offered In: Fall, Winter, Spring, Summer

*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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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

## EPIDEMIOL 299D Dissertation Research (8 Units)

Offered In: Fall, Winter, Spring, Summer

*Instructor(s):* Catie Oldenburg

**Prerequisite(s):** Must have passed PhD Qualifying Examination

**Restrictions:** Must have passed PhD Qualifying Examination

**Activities:** Project

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

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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)

Offered In: Fall, Winter, Spring, Summer

*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.

**Activities:** Lab science, Discussion

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 TCR 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 and Epidemiological Research Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**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