# 2022-23

University of California, Irvine

Environmental Health Sciences Graduate Handbook

> Program in Public Health



#### PROGRAM IN PUBLIC HEALTH

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# Introduction

The purpose of this handbook is to provide specific information on policies, procedures, and regulations pertaining to graduate study in the Environmental Health Sciences Graduate Program.

Students completing degree requirements in the Graduate Program in Environmental Health Sciences will earn either the degree of Doctor of Philosophy in Environmental Health Sciences or Master of Science in Environmental Health Sciences. The doctoral program in Environmental Health Sciences is a researchbased program with two tracks of study. The Environmental Toxicology Track focuses on identifying and quantifying the effects of environmental agents including chemical, physical, and biological exposures on human health and elucidating the mechanisms by which these agents act. The Exposure Sciences and Environmental Epidemiology Track focuses on population-based research and the evaluation of human exposures to and risks from environmental agents and effects of exposure to environmental agents and other factors on health outcomes. The master's program offers course work in both environmental toxicology and population-based environmental health sciences with options to focus on experimental research.

The EHS Graduate Handbook is revised annually in a collaborative process involving representatives from a number of campus offices and departments, including, but not limited to, Dean of Students; Student Accountability, Community Standards, and Academic Integrity; Housing and Residential Experience; Equal Employment Opportunity; Title IX and Student Discrimination; Student Access Services; Risk and Insurance Management; General Counsel, and Communications, taking into account ideas and suggestions from students, student organizations, faculty, staff, and University committees.

This *Graduate Handbook* is intended to be a supporting guide for our EHS students and faculty, rather than an exhaustive compilation or an official statement of requirements. Keep in mind that students should also consult the UCI General Catalogue. In instances of conflict between this handbook and official university policies or program policies, current official policies take precedence. The handbook will be distributed to all entering students and faculty and will be regularly updated. Suggestions for revisions and additions are welcome.

# New Student Information

### **Entrance Requirements**

General requirements for admission to graduate study are established in the UCI General Catalogue in the section "Research and Graduate Studies" and in the Graduate Division bulletin "UCI Graduate Application for Admission."

The table below lists the additional entrance requirements for all graduate students majoring in Environmental Health Sciences. For cases in which students with deficiencies in certain areas are admitted into the graduate program, those deficiencies will be reconciled during the first year of residence in the program. The student will be notified of any apparent deficiency at the time of acceptance into the graduate program.

#### Additional Entrance Requirements for Students Applying to the EHS Graduate Program

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Subject	Number of Years	
General Biology	One year of general biol molecular biology or bio recommended.	logy; one quarter of ochemistry is strongly
Mathematics	One year of calculus and	d/or statistics
Chemistry	One year of chemistry; o strongly recommended toxicology track	organic chemistry is for environmental

### Registration

The EHS program accepts students for the fall quarter only. <u>Students can register for classes online</u> using their UCInetID. Prior to the first quarter, students will be able to register once they have been advised by email about course selection. Each quarter, students will be required to meet with their faculty mentor to receive approval before finalizing their course schedule for the next quarter.

Courses can be dropped online through the end of second week without late fees. Students adding classes or changing units/grading options after the end of the second week of classes will be assessed a late registration fee. Students adding a class after second week will need to submit a request through the <u>Enrollment Exception Request System</u>. Drops after the second week of the quarter are only approved if there is a documented extenuating circumstance. The student must receive approval from both the instructor of the course and the Program in Public Health Department. Each quarter, the campus performs a census of enrollment upon which state funding is based; therefore, we encourage students to enroll before the end of the second week of classes to ensure that the university receives full educational funding and to avoid late fees.

### Enrollment

A minimum of 12 units of graduate or upper-division undergraduate coursework is required to be considered a full-time student. Upper division undergraduate course units may count as workload units for the purposes of being considered a full-time student, but ordinarily may not be used to fulfill degree requirements. Students receiving departmental merit funding (generally for new students only) must be enrolled full-time in order to receive the funding. Teaching Assistant and Graduate Student Researcher positions require full-time enrollment. Students not enrolled full-time may jeopardize their funding for other types of aid, including need-based financial aid and university fellowships.

### **Residency Requirements**

All degree-seeking students should complete a <u>Statement of Legal Residence (SLR)</u> immediately after submitting their <u>Statement of Intent to Register (SIR)</u>. Official residence determinations are made only after the student's SLR is reviewed and any requested documentation is received by the University Registrar's office.

### **International Students**

Information about requesting a visa document, paying for a visa, paying the SEVIS fee, and planning a trip to Irvine <u>can be found here.</u>

UCI International Center Location: G302 Student Center Telephone: 949-824-7249 Website: http://www.ic.uci.edu

### Orientation

Incoming EHS students are asked to attend two orientations before the start of instruction. One of the orientations is the Campuswide New Graduate Student Orientation hosted by Graduate Division, which is usually held in the weeks prior to fall quarter starting as an asynchronous course on Canvas. The other orientation is specific to the Program in Public Health and is mandatory. This orientation, which is traditionally a few days prior to the first day of classes, introduces the program and provides an opportunity to meet faculty and fellow students. Initial advising from faculty mentors and the Assistant Director of Graduate Affairs usually occurs prior to orientation via email, and before the deadline to enroll and pay for classes.

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### Housing

Information about <u>campus housing</u> options for graduate students can be found at the hyperlink. Incoming students are advised to place themselves on the waitlist as early as possible to improve chances of securing on-campus housing. Though EHS students are not guaranteed housing, there are a wide variety of options in the area to suit the needs of students. <u>There are plenty of apartments available in Irvine and in the surrounding areas</u>.

### **Health Insurance**

All graduate students are required to have health insurance while attending UC Irvine. The university provides medical, dental, and vision coverage through the <u>UC Student Health Insurance Plan</u> (UC SHIP). If students would prefer health insurance outside the university, <u>they may waive participation in UC SHIP</u>. Fees for UC SHIP are automatically assessed to students' billing accounts unless students <u>successfully waive out</u> of the plan.

### **Electronic ID**

The UCInetID is electronic identification used for many online services at UC Irvine. This should be activated as soon as you submit your Statement of Intent to Register so you can begin to receive university and program communications.

Your UCInetID is a secure username and password that you use to gain access to your UCI email, registration, bill payment, and many more campus services. Services such as <u>Canvas</u>, <u>UCI Google Drive</u>, and <u>WebReg</u> require students to use their UCInetID and password in order to log in. It is for individual use only and passwords should not be shared. OIT offers <u>Sponsored UCInetIDs and Group UCInetIDs</u> for special situations.

To activate your UCInetID, students need an ID number first. Applicants will be sent an ID number when they first apply to UCI. Students who have an ID number should <u>visit our website to activate the UCInetID</u>. Date of birth and the last 4 digits of a Social Security Number are required. Students who do not have a social security number should enter all zeros, leave it blank, or use the identification number entered on the <u>UC Application</u>.

Your **UCInetID@uci.edu** is your email address and should be used for all communications to and from the campus. If you are issued a Health Sciences email, **UCInetID@hs.uci.edu** because of your employment, please refrain from using the hs.uci.edu email address to prevent potential loss of data when your employment ends. It may be used for login credentials for your position.

### **DUO Multi-Factor Authorization**

Students will also need to register for Multi-factor Authorization using the DUO application that can be downloaded to their phone. Please visit the Offices of Information Technology IT Security website on steps to enroll in DUO for your main UCI accounts: <u>https://duo.oit.uci.edu/.</u> If you have a need, typically

employment or research related to access Health Sciences accounts, visit Health Sciences IT security on steps to enroll in DUO: <u>https://it.health.uci.edu/security/Duo-Two-Factor-Support.asp</u>

### **Parking & Transportation**

Transportation and Distribution Services (T&DS) provides a wide variety of resources for the UCI community including campus maps, parking information, and sustainable commute solutions for reducing greenhouse gas emissions and savings on travel costs.

A valid parking permit must be displayed at all times on the UC Irvine campus. Student permits are available online at <u>myCommute</u> by logging in with a UCInetID. All available zones and permit options will appear and may be purchased on a first-come-first-serve basis. Parking zones can be changed based on availability. In order to renew a current zone, simply purchase a new permit when a current permit is still valid. Student permits may be purchased using any major credit card.

Parking & Transportation Location: 200 Public Services Building Telephone: 949-824-7275 Website: <u>http://www.parking.uci.edu</u>

### **Campus Map**

Nestled in the heart of Orange County, the University of California, Irvine is located in one of the safest large cities in the nation. UCI students, faculty and staff come together on the campus's 1,478 acres to be the driving force of innovation and discovery that benefits our community. Visitors can experience the vibrant campus life of 33,000+ students for themselves by using the 405 freeway or 73 tollway, or taking one of four OCTA bus routes that service our campus. <u>Click here for interactive Campus maps</u>.

### **Statement of Legal Residence**

It is important that you complete and submit the Statement of Legal Residence as soon as possible. Establishing California residency is a key factor in determining whether or not you will need to pay nonresident supplemental tuition. If you need assistance in filling out the form or have questions about your residency status, please email the UCI Residence Office or call 949-824-6129.

### **Clear Provisional Admission by First Fall Quarter**

If your admission letter from the Graduate Division stated that your admission is provisional because we need further documentation from you, you must submit the missing documents before you can begin attending classes. The documents (usually final transcripts, degree confirmation, and/or letters of recommendation) can be submitted directly to the Graduate Student Affairs Office.

### International Students (as applicable)

All international students must secure a visa before coming to the United States to study at UC Irvine. The most common student visa is an F1, but there are other kinds of visas available. If you already have a valid visa that allows you to study in a degree-earning program, then we would recommend that you check with the International Center to see if you should continue on that same visa or switch to an F1. There are distinct advantages to each kind of visa and the International Center can best advise you given your particular situation.

If you do need to request a visa document, you need to fill out a New Graduate Student Request document and return it to the department as soon as you are admitted to ensure that your documents arrive on

time for you to begin school in late September. The Request Form will be sent to you by the department. Once you return the form to the department, the International Center will process the forms to aid you in applying for a student visa. The International Center can be contacted at 949-824-7249.International students are eligible for the <u>Non-Residential Supplemental Tuition Remission Program</u>. The initiative program provides NRST fellowship support to international PhD and MFA students in an effort to reduce costs on faculty grants and departmental funds.

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Cohorts enrolling 2021 and beyond: NRST for years 2 and 3 for PhD and MFA students who are employed or on fellowships of equivalent levels that would typically generate remission (25% time for ASE or GSR, equivalent level for fellowship). If students do not advance by the end of year 3, students are subject to paying NRST out of pocket.

Students must also meet all other academic requirements for fellowship support (i.e. grades, GPA, etc.) in order to receive NRST support from this program. Your funding offer is based on the expectation that you will qualify for the NSRT Remission Program.

### Non-Resident/Out of State Residents (as applicable)

If you are relocating to California from another state, you will be asked to establish <u>California</u> <u>residency</u> after your first year. Keep all receipts from your move to validate when you began residency. You will submit a "<u>Grad Petition for Resident Classification</u>."

There are certain guidelines on who is eligible for resident classification for tuition purposes. It is highly recommended that you review this before your first fall quarter to prepare the necessary documentation and submit your petition by the filing period before your fall quarter of your 2<sup>nd</sup> year. This is typically done during the summer. Late petitions are not accepted by the university. Your funding offer is based on your CA residency by your second year.

# **Environmental Health Sciences Program Information**

### **Administration & Staff**

Director/Associate Dean of Academic Affairs Scott Bartell Telephone: 949-824-5919 Email: <u>sbartell@uci.edu</u>

> **Doctoral Director** Jun Wu Telephone: 949-824-0548 Email: junwu@hs.uci.edu

Department Chair Department of Environmental and Occupational Health Veronica Vieira Telephone: 949-824-7017 Email: <u>vvieira@uci.edu</u>

#### **Director of Student Affairs**

Jacqueline Barruga

Telephone: 949-824-0546 Email: <u>barrugaj@exchange.uci.edu</u>

#### Assistant Director of Graduate Affairs Gabriella Pham Telephone: 949-824-4754 Email: gapham@uci.edu

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#### Community Engagement Coordinator Rocio Torres Telephone: 949-824-2358 Email: <u>rociot1@uci.edu</u>

### **Core Faculty**

Jun Wu, PhD — Director, Environmental Health Sciences Graduate Program

Wu's research focus is on population-based research of environmental exposure assessment, environmental epidemiology, and environmental health disparity. She has extensive experience and knowledge in examining the influences of various environmental exposures (e.g. air pollution, climate, and built environment) on reproductive outcomes (e.g. maternal and fetal health), children's health, and other health endpoints. She also has strong interest in research on environmental justice and environmental health disparity, particularly working in partnership with communities.

#### Scott M. Bartell, PhD

Bartell's research in exposure sciences and risk assessment focuses on probabilistic models and statistical methods for exposure assessment, environmental epidemiology and risk decision analysis.

#### Stephen C. Bondy, PhD

Bondy's research in molecular neurotoxicology focuses on the potential role of toxic agents in the promotion of brain aging and neurological disease. Studies include evaluation of agents that accelerate or retard the aging process. Endpoints range from behavioral tests to assay of gene expression. In addition, the properties of aluminum that relate to neurotoxicity and its possible contribution to Alzheimer's disease are being investigated.

#### Saurabh Chatterjee, PhD

Chatterjee is human physiologist with specialized training in immunology. He has strong interest in the field of host microbiome interactions with redox biology, neuroimmune pathology and gut-brain interactions in pro-inflammatory disease processes like Gulf War illness, chronic multi-symptom illnesses and brain manifestations of liver diseases, drug discovery and gut-brain directed therapeutics.

#### Andrea De Vizcaya Ruiz, PhD

De Vizcaya-Ruiz's research has centered on the experimental effects of particulate matter, using in vitro and in vivo models, specifically, studying the tissue injury inflammatory and oxidative stress underlying mechanisms. Some of her work extends to nanotoxicology and nano safety. Her research interest is on inhalation toxicology that studies inflammation, advanced materials toxicology, tissue injury, pulmonary disease, and other diseases beyond the lung, including cardiovascular, renal dysfunction, and in utero toxicity.

#### Masashi Kitazawa, PhD

Kitazawa's primary research focuses on understanding the impact of neuroinflammation on the molecular pathogenesis of Alzheimer's disease (AD). In particular, how aging and/or environmental exposure perturb physiological functions of astrocytes and microglia and disrupt inflammatory microenvironment in the brain, leading to the development and progression of the disease.

#### Michael T. Kleinman, PhD — Co-director, Air Pollution Health Effects Laboratory

Kleinman's research focuses on the mechanisms of cardiopulmonary injury following inhalation of toxic compounds. His laboratory uses state-of-the-art methods to evaluate the roles of free radicals and oxidative

stress in sensitive human volunteers and laboratory animals. In vitro methods are used to evaluate specific mechanisms. Other interests include analytical and atmospheric chemistry, environmental sampling and analysis, and the application of mathematical and statistical methods to environmental and occupational assessments of exposure and risk.

#### <u>Ulrike Luderer, MD, PhD, MPH</u>

Luderer's research on reproductive and developmental toxicology is focused on understanding the role(s) of oxidative stress and antioxidants in ovarian toxicity, ovarian aging and ovarian cancer. A second area of focus is developmental toxicology of the reproductive system, specifically the developmental basis of premature ovarian failure and ovarian cancer.

#### Robert F. Phalen, PhD — Co-director, Air Pollution Health Effects Laboratory

Phalen's research focus is on the aerodynamics of particle deposition in the developing lung and in the adult lung. Another area of interest is in the assessment of lung defense mechanisms using radio-labeled aerosol inhalation challenges. His lab uses quantitative morphometry to study the mechanism of interference with organogenesis and possible long-term consequences for chronic lung disease due to toxic inhalation exposure. Additional studies include evaluating the tolerance of animals to air pollution mixtures as a mechanism that may protect humans against ambient pollutants.

#### David B. Richardson, PhD

Richardson has strong interest in the health effects of occupational and environmental exposures as well as injury surveillance, and development of novel methods for epidemiology. Part of his work focuses on occupational and environmental carcinogens, including radiation, asbestos, benzene, and beryllium. He also works on methodological developments for occupational cancer research and theoretical models of carcinogenesis and their application to analyses of exposure-time-response associations.

#### Nicole R. Sparks, PhD

Sparks focuses on embryonic bone development using Stem Cell and in vivo models, and how environmental toxicant exposure disrupts transcriptional regulators resulting in bone birth defects.

#### Veronica Viera, PhD

Vieira has an extensive knowledge of GIS, groundwater modeling, cluster detection methods, and on persistent environmental contaminants including tetrachloroethylene (PCE, a dry-cleaning solvent), perfluorooctanoic acid (PFOA, a perfluorinated compound (PFC) involved in the manufacturing of Teflon), and polybrominated diphenyl ethers (PBDEs, a common class of flame retardants). Components of her work include improving methods for geocoding rural addresses using GIS and examining the relationship between PFOA exposures and health outcomes. Vieira's research also includes method development for spatial epidemiology such as disease mapping, cluster detection, and space-time interactions.

### **Affiliated Faculty**

#### Bruce Blumberg, PhD

Blumberg's research focuses on the role of nuclear hormone receptors in development, physiology and disease and how these may be disrupted by hormonally active compounds in the diet and environment. Particular research interests are the effects of environmental endocrine disrupting chemicals (obesogens) on the development of obesity and on the role of highly chlorinated chemicals such as PCBs and PBDEs on the development of the immune system and on lymphoma.

#### Vincent J. Caiozzo, PhD

Caiozzo's expertise is in structure and function of muscle with an emphasis on exercise physiology. He has a special interest in the role of environmental toxicants in modulating physiological responses in human muscle.

#### Jefferson Y. Chan, MD, PhD

Chan's research in chemical pathology focuses on the oxidative stress response in cells exposed to toxic xenobiotics.'

#### <u>Derek Dunn-Rankin, PhD</u>

Dunn-Rankin's major research focus is on laser and optical diagnostics in practical systems, optical particle sizing, droplet formation and vaporization and their application to human exposures.

#### <u>Rufus D. Edwards, PhD</u>

Edwards' research in exposure sciences and risk assessment focuses on air pollution, particles, volatile organic compounds, greenhouse gases and environmental epidemiology in the developing world and European cities.

#### Chenyang (Sunny) Jiang, PhD

Jiang's research focus is in coastal water quality microbiology and the application of molecular techniques to detect human pathogenic bacteria and viruses in aquatic environments.

#### <u>Virginia Kimonis, MD</u>

Kimonis is a Clinical Geneticist-Scientist with a strong interest in the genetics of neuromuscular diseases. Her laboratory focuses on the genetic causes of muscle disease. She is particularly interested in inherited muscle disorders that occur in combination with diseases of bone.

#### <u>Charles E. Lambert, PhD</u>

Lambert's interests are in industrial and regulatory toxicology, pharmaceutical toxicology as it relates to impurities and degradants, green chemistry and life cycle evaluations, risk assessment and risk communication.

#### <u>Charles L. Limoli, PhD</u>

Limoli studies the mechanisms by which cells perpetuate genomic instability in response to radiation and environmental toxicants and the role of oxidative stress in these processes. He also explores how DNA damage and oxidative stress may drive the progression of normal multipotent cells in the central nervous system to brain tumor stem cell.

#### <u>Oladele A. Ogunseitan, PhD</u>

Ogunseitan's research is focused on microbial diversity and ecology, environmental pollution, industrial ecology, health and development.

#### <u>Kathryn E. Osann, PhD</u>

Osann's specialty is in cancer epidemiology and applied biostastics.

### **Faculty Emeritus**

#### Dean B. Baker, MD — Professor Emeritus

Baker's epidemiologic research is focused on environmental studies of hazardous waste sites, childhood exposure to environmental pollutants, asthma among inner-city children, the role of irritant exposure in occupational asthma, occupational stress, indoor air pollution and the use of biological markers of exposure for subclinical effects.

John Leslie Redpath, PhD – Professor Emeritus

Ronald C. Shank, PhD- Professor Emeritus

# Requirements for the Degree of Doctor of Philosophy in Environmental Health Sciences

### Requirements

The doctoral student must complete the following requirements to qualify for the degree of Doctor of Philosophy in Environmental Health Sciences:

- 1. The number of units required for the PhD degree is 44 units. This includes program wide core courses, track specific core courses and electives. The 44 units excludes Environmental Health Sciences Seminar: EHS 298, which must be taken every quarter the student is in the program, and Research Problems: EHS 299, which varies depending on other units being taken from quarter to quarter).
  - a. Of the 44 units required, all students must complete 3 program wide core courses (12 units) as well as the 32 units specific to their track:
    - i. Environmental Toxicology track = 4 core courses and 16 units of electives
    - ii. Exposure Sciences and Environmental Epidemiology = 5 core courses and 12 units of electives
- 2. The Ph.D. student must complete all required courses, pass the comprehensive examination and must pass the Qualifying Examination to advance to candidacy.
- 3. A written dissertation based on the student's original research, and a successful defense of the dissertation during an oral examination given by the student's doctoral committee.
- 4. Full-time residence for at least 6 regular academic quarters.

### Ph.D. Program Curriculum Plan: Years 1&2

Program-wide Core Curriculum – for Ph.D. students in both Environmental Toxicology Track and Exposure Sciences and Environmental Epidemiology Track

PUBHLTH 206A	Principles of Epidemiology	4 units
PUBHLTH 204	Biostatistics I	4 units
EHS 264*	Introduction to Environmental Health Science	4 units
EHS 298**	Environmental Health Sciences Seminar	2 units

\*EHS 270 may be substituted for EHS 264 with the approval of the advisor if the student already possesses a background in environmental health sciences

\*\*Additionally, students enroll in EHS 298 each quarter until degree completion

Track-Specific Core Courses- Environmental Toxicology Track			
EHS 202	Principles of Environmental Toxicology	4 units	
EHS 206A	Target Organ Toxicology A	4 units	
EHS 206B	Target Organ Toxicology B	4 units	
EHS 201	Case Studies in Environmental Toxicology	4 units	

Additionally, Environmental Toxicology Track students are required to complete 16 units of electives from the approved electives course list.

Track-Specific Core Courses- Exposure Sciences & Environmental Epidemiology Track			
PUBHLTH 283	Geographic Information Systems	4 units	
PUBHLTH 204B	Biostatistics II	4 units	
EPIDEM 205	Environmental Epidemiology	4 units	
EHS 275	Environmental Modeling and Risk Assessment	4 units	
EHS 202*	Principles of Environmental Toxicology	4 units	
EHS 206 A*	Target Organ Toxicology A	4 units	
EHS 206 B*	Target Organ Toxicology B	4 units	

\*Select one of the 3 environmental toxicology course (EHS 202, 206A or 206B). If you are at all unsure about your choice of track, you should take EHS 202 because it is the introductory environmental toxicology course.

Additionally, Exposure Sciences & Environmental Epidemiology Track students are required to complete 12 units of electives from the approved electives course list.

#### Approved Electives for both Environmental Toxicology Track and Exposure Sciences and Environmental Epidemiology Track PhD Students

Approved Elective Pool*			
EHS 203	Psychosocial Occupational Epidemiology	4 units	
EHS 204	Neurotoxicology	4 units	
EHS 212	Inhalation Toxicology	4 units	
EHS 220	Industrial Toxicology	4 units	
EHS 269	Air Pollution, Climate and Health	4 units	
EHS 294	Occupational Health Psychology	4 units	
EPIDEM 244	Toxic Chemicals in the Environment	4 units	
Anatomy 203A, B	Human Microscopic Anatomy	6 units	
DEV BIO 231B	Cell Biology	4 units	
MOL BIO 203	Nucleic Acid Structure and Function	4 units	
MOL BIO 204	Protein Structure and Function	4 units	
MBB 203	Structure/Biosyn. Nucl. Acids	4 units	
MBB 204	Structure/Biosyn. of Proteins	4 units	
Physiology 206A, B	Introduction to Medical Physiology	11 units	
PUBHLTH 206B	Intermediate Epidemiology	4 units	

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PUBHLTH 206C	Advanced Epidemiologic methods	4 units
PUBHLTH 204C	Biostatistics III: Advanced Statistical methods	4 units
PUBHLTH 209	Methods of Demographic Analysis	4 units
PUBHLTH 281	Infectious Disease Epidemiology	4 units
PUBHLTH 208	Advances in Social Epidemiology	4 units
PUBHLTH 286	Advanced GIS and Spatial Epidemiology	4 units
EPIDEM 232	Chronic Disease Epidemiology	4 units
STAT 203	Statistical methods for data analysis III	4 units
PUBHLTH 241	Environmental Policy and Global Sustainability	4 units
PUBHLTH 222	Health Policy and Management	4 units
PUBHLTH 223	Risk Communication	4 units
PUBHLTH 211A	Latinos/Latinas and Medical Care: Contemporary Issues	2 units
PUBHLTH 211B	Latinos/Latinas and Medical Care: Contemporary Issues	2 units

\*Any core courses in either track may be taken as electives by students in the other track; additional courses may be added to this pool upon approval of the Program Faculty.

### Ph.D. Program Curriculum Plan: Years 3&4

Students are required to be enrolled full-time at 12 units a quarter. Upon completion of the of the above courses, students will then enroll in EHS 298 and EHS 299 for a total of 12 units each quarter.

EHS 298	Environmental Health Sciences Seminar	2 units/quarter
EHS 299	Research Problems	1-12 units/quarter

Advancement to Candidacy: The Ph.D. student must complete all required courses, pass the comprehensive examination, typically by the end of Year 2, and must pass the Qualifying Examination, typically during Year 3, to advance to candidacy.

### Seminar

The Environmental Health Sciences Seminar (EHS 298) is a required course for each graduate student in the program for each quarter the student is in residence. The seminar is organized by the faculty and graduate students during fall, winter and spring quarters. This is the one opportunity on a weekly basis that brings the faculty and students together, and all students in the program are required to attend all EHS 298 seminars and to take active parts in the discussions. Faculty are also expected to attend seminar. Each predoctoral student will present **two** seminars per year if they did not do a research-in-progress (RIP) talk

at the annual EHS Scientific Retreat in September. For first and second year predoctoral students, the subject of the seminar should be on a topic in environmental health in which they have special interest but not a report of their own ongoing research. Senior graduate students can make their research efforts the subject of one of their seminar presentations each year. The student's grade (A, B, etc) for seminar will be based on the student's attendance, participation in the discussions, and presentation during quarters in which the student presented. Presentation criteria include:

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- 1. Ability to analyze environmental health problems rather than merely describe them
- 2. Thoroughness with which the topic was reviewed and presented
- 3. Ability to respond adequately to questions from the audience
- 4. Ability to communicate one's ideas, i.e. a clear and interesting presentation, including public speaking skills and illustrations (slides, etc.)

Students should follow the steps below in preparing their seminar presentations.

- 1. Select the topic carefully; consult with the seminar coordinator (Dr. Luderer), your research advisor and other faculty members if you need help choosing a topic. The topic must be in the areas of toxicology, exposure sciences, or risk assessment, should be based on scientific evidence, and should be analytical ('why is something toxic; ''what is the scientific evidence that something causes a specific response') rather than descriptive ('compound A causes renal damage'). Stress mechanisms of toxic action or exposure pathways, integrate exposure and toxicity wherever possible.
- 2. Begin preparing early; it can take up to 50 hours to prepare an excellent presentation.
- 3. Do a literature search to make sure you have covered all the pertinent areas.
- 4. Read all of your material before writing your presentation; take notes and make outlines. Ask yourself questions; this may suggest further searching of the literature.
- 5. Integrate your material and decide what information you want to present, what order you want to use to present your material, and how you are going to present it (verbally, slide with text or table or graph or photograph, etc). Select a few key articles and present and discuss data from those articles to make key points.
- 6. Write out your presentation.
- 7. Consult with a faculty member to make sure you are on the right track.
- 8. Prepare your PowerPoint presentation.
- 9. Practice giving the presentation.
- 10. Don't read from notes; use your graphic material as 'cue cards'.

### **Research Rotations**

New students are expected to get involved in research at the earliest possible time, usually in the first quarter of the program. All students are encouraged to take advantage of the rotation option. A rotation consists of a series of residencies in laboratories/research groups of the student's choice; one quarter is spent in each laboratory/research group. Three rotations per academic year and one rotation during summer quarter of the first year are possible; two are suggested. Professors will be responsible for acting as an advisor/mentor to the student and instructing the student in proper laboratory procedures, experimental design, and data analysis/scientific interpretation. If the entering student is sure of the area in which he/she wants to work, a research rotation is not required.

### **Comprehensive Examination**

A written comprehensive examination is given by the Environmental Health Sciences faculty, usually at the end of the second year of study early during summer quarter. The examination evaluates the student's knowledge of the fields covered by the core courses. The student must demonstrate competence in the core subjects and the ability to think analytically in order to continue to the dissertation research. All program faculty members can participate in preparing examination questions, but generally only those who have taught in the core courses do so. Students are required to answer a percentage of these questions, although some questions may be mandatory. The comprehensive examination is open book/open note. A scientific calculator is permitted, but laptops and other electronic devices are not permitted. The exam is given in

two days over a five-hour period each day, with 7 problems each day. Students are required to answer at least 10 and pass at least 9 of the 14 questions. Responses are graded pass/fail. The student about to take this examination is encouraged to consult faculty and senior graduate students who have recently completed this requirement to get an idea of the nature of the examination and sample questions. Students narrowly failing the examination will be permitted to retake the examination within 12 months. Failure on the second attempt of the retake leads to disqualification from the predoctoral program; under such circumstances the student may petition the faculty to transfer to the master's degree program.

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### **Qualifying Examination/Advancement to Candidacy**

#### **Preadvancement Committee Meeting**

A preadvancement committee meeting is required by the beginning of the third year and preferably during the summer of the second year. The committee should consist of the faculty advisor and two to three other Environmental Health Sciences faculty members, who will also serve on the qualifying/advancement to candidacy committee. The purpose of this meeting is to ensure that all students have accomplished reasonable progress in their research during their first two years in the Environmental Health Sciences graduate program. There is no written component for this meeting. However, all students are expected to prepare a presentation (between 30-45 min) for the pre-advancement meeting. During the oral presentation the committee will discuss the research with the student. After this discussion, the committee will excuse the student from the room and evaluate the student's performance. The committee recommendations should be written on the Advisement Committee Meeting Report form, which should be signed by the student and committee members.

In addition to the Pre-Advancement meeting, students should meet with the Assistant Director of Graduate Affairs to discuss the necessary administrative procedures and forms. Ideally, this happens at the quarter prior to advancement. The **PhD Form I** DocuSign document will be initiated by the Assistant Director of Graduate Affairs.

#### Timing of the Examination

An oral qualifying examination is required and should be taken not later than the twelfth quarter after entrance into the program; usually it is given during winter, spring, or summer quarter in the third year of graduate study.

#### **Qualifying Advancement Committee**

It is administered by the Candidacy Committee for the individual student. Committee members are recommended by 1) the Director of the Environmental Health Sciences Program, 2) the student's research advisor, and 3) the student, and approved by the Director of the Environmental Health Sciences Graduate Program and the Dean of Graduate Studies and Research.

The Candidacy Committee is comprised of five members, a majority of whom are members of the program faculty. The Chair of the Candidacy Committee must be a member of the program faculty and a voting member of the Academic Senate. The UCI Faculty Bylaws requires that all members of the Candidacy Committee be voting members of a UC academic senate; as the number of the faculty in the Environmental Health Sciences program is small, exception to this rule to permit nontenured Environmental Health Sciences faculty to serve on these committees can be approved by the Dean of Graduate Studies if the exception is well justified.

One member of the Candidacy Committee, designated the "outside member," must be a voting member of the UC Academic Senate not necessarily the Irvine Division who does not hold an appointment in the student's discipline or academic unit (school or independent program). As the outside member represents the UC faculty at large, special expertise in the area of the student's dissertation is not necessary. Three members of the Candidacy Committee will continue, after the student has successfully completed the oral examination and advanced to candidacy, as the Doctoral Committee to supervise completion of the research dissertation.

Details on the permissible composition of the advancement committee can be found in <u>Graduate</u> <u>Division's Policies and Procedures Handbook</u>.

The names of the proposed faculty members for the Candidacy Committee must be submitted to the Graduate Studies Office by the Director of the graduate program at least one month prior to the date of the qualifying examination.

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#### **Goal of the Exam**

The purpose of the exam is to determine if the student is capable of Ph.D. quality research. This encompasses two related aspects: 1) defining a tractable research problem; and 2) demonstrating requisite knowledge, skills and experimental sophistication to convince the committee that there is a high probability for the project to succeed. The Advancement to Candidacy Exam is a University-level requirement.

#### Written Proposal

A written proposal in the format of a federal grant proposal should be prepared by the candidate and distributed to the committee at least 1 week prior to advancement.

#### Written Proposal Format

The proposal should follow conventional format for a federal grant. The manuscript should be prepared with proper scientific nomenclature, as would be acceptable to a granting agency. The document should be approximately 12-15 pages (single-spaced with 1 inch margin) excluding references. The document should include the following sections.

**Specific Aims (1 page)**. It is the single most important section in the proposal. It's the master plan for the rest of the proposal and the most difficult section to write. The logic of each aim must be compelling and the answers must be important to the field. Whenever possible, test a hypothesis in the specific aim title. The Specific Aims should not be a list of experiments. Avoid writing aims that can be viewed as "a fishing expedition".

**Introduction (2-3 pages)**. Problems and objectives of your research should be clearly stated and placed in the context of a broader field. An extensive bibliography should be included. This section should lead the reader to each question or hypothesis that you're testing in each aim. Significance of the project should be also included here.

**Preliminary results (3-5 pages)**. This section should include your research efforts. Appropriate discussion and methods are important; you should show how you can perform all of the necessary techniques and methods. Please embed figures into the text and include a brief legend. Figures and Tables must be absolutely clear and visible.

**Proposed research (6-8 pages)**. The proposal should address the feasibility of various experiments or analyses and point out pitfalls that might be encountered and how these could be circumvented. Be sure to include positive and negative controls, analysis and interpretation, pitfalls and alternative approaches, and somewhat detailed methods.

#### **Oral Proposal Format**

The oral portion of the exam will involve the presentation of background material, preliminary results and a summary of proposed experiments. The presentation should be~20-30 minutes (20-30 PowerPoint slides), although committee discussion will usually interrupt the flow. During this time the committee will evaluate whether or not you have the ability to formulate questions on important environmental health sciences issues. You may be asked to discuss experimental design, required controls for an experiment, and possible artifacts or caveats. You will be expected to place the significance of the research project in a broad context, and demonstrate in-depth knowledge of the discipline in which you are working. The exam should be scheduled for a three-hour time period, although it will typically last about two hours.

The proposal and presentation serve as the initial focus of the qualifying examination; that is, it starts the examination in an area in which the student should feel comfortable. This mitigates some of the nervousness students may experience in taking a critical oral examination before a faculty panel. (The proposal can also serve as a guide to the student's dissertation research program; however, the student is not obligated to follow the course of studies in that proposal in developing the final dissertation.) It is recommended that students practice answering incisive questions orally before taking this examination. Students who fail this examination may be given the opportunity to stand for re-examination at the discretion of the Candidacy Committee. Re-examination should occur within 6 months of the first qualifying examination. Students failing the second examination are disqualified from the doctoral program; they may petition the program faculty to transfer to the master's degree program

The results of the Qualifying Examination will be submitted to the Office of Graduate Studies on the **Ph.D. Form I.** This DocuSign form will be initiated by the Assistant Director of Graduate Affairs. The form must be signed by all committee members at the time the candidacy examination is concluded and submitted even if the examination was failed. If the unanimous recommendation of the Committee is favorable, a \$90 Advancement to Candidacy Fee must accompany the Form I (paid by the student, unless other arrangements have already been made).

#### **Teaching Requirement**

There is no official teaching requirement for the EHS Graduate Program. However, each doctoral student is encouraged to serve as a teaching assistant in an undergraduate course in the School of Biological Sciences or the Program in Public Health for at least one quarter. Serving as a teaching assistant may also be required as part of your funding.

#### **Dissertation & Final Examination**

The dissertation will present basic research on an original research problem in Environmental Health Sciences. The research will demand an intensive concentration of the student's time, effort and energy, and the faculty advisor will encourage the student to work with greater independence as progress is achieved. Progress in the research project is followed by the student's Doctoral Committee during at least annual meetings with data presentations by the student. The student is encouraged to seek consultation with faculty members, and other scientists and professionals outside the University to make the research experience as enriching as possible.

Students should meet with the Assistant Director of Graduate Affairs to discuss the necessary administrative procedures and forms for the dissertation/final degree. Ideally, this happens at the quarter prior to the final defense/examination. The **PhD Form II** DocuSign document will be initiated by the Assistant Director of Graduate Affairs.

When the student and/or advisor feels the student has learned how to do original and independent research and has produced publishable results, the student should present his/her experimental results to the candidate's Doctoral Committee; when the Committee agrees that the experimental work should terminate, the candidate begins writing the dissertation. The student submits draft copies of the written dissertation to each member of his/her Doctoral Committee for review and approval (this review takes approximately a month).

The Doctoral Committee supervises a final examination, the focus of which is the content of the doctoral dissertation (dissertation defense). Ordinarily, the final examination will be given just prior to the completion of the dissertation and while the student is in residence during a regular academic session, and will be open to all members of the academic community. The defense is usually conducted in the same format as a seminar.

The Doctoral Committee certifies that the completed dissertation is satisfactory through the signatures of all Committee members on the signature page of the completed dissertation. The final copy must meet the <u>University's requirements for style, format, and appearance</u> before the degree can be conferred.

After the dissertation has been approved by the Doctoral Committee, a final copy of the dissertation must be submitted, with the appropriate forms. The electronic submission option is now the preferred option,

although paper submission is still permitted. In either case, the document will be examined to assure that it meets all University requirements. More information about submission requirements can be found on the Graduate Division website above. The student must also provide one copy of the dissertation for each member of his/her Doctoral Committee and one copy for the Graduate Program in Environmental Health Sciences.

Upon completion of the dissertation defense and approval of the dissertation, the Doctoral Committee recommends, by submission of the Ph.D. Form II, the conferral of the Ph.D. degree, subject to final submission of the approved dissertation for deposit in the University Archives. The results of the Qualifying Examination will be submitted to the Office of Graduate Studies on the **Ph.D. Form I.** This DocuSign form will be initiated by the Assistant Director of Graduate Affairs.

The expense of preparing the written dissertation is borne by the student. The Environmental Health Sciences Program does provide, without charge to the student, use of microcomputers and word processing and graphics software for preparing the document.

### Sample Program Tracks

Environmental Toxicology Track				
1 <sup>st</sup> yr. Fall	PUBHLTH 206A, 4 units	PUBHLTH 204, 4 units	EHS 202, 4 units	EHS 299, 2 units
1 <sup>st</sup> yr. Winter	EHS 264, 4 units	EHS 206A, 4 units	EHS 298, 2 units	EHS 299, 2 units
1 <sup>st</sup> yr. Spring	EHS 206B, 4 units	EHS 201, 4 units	EHS 298, 2 units	EHS 299, 2 units
1 <sup>st</sup> yr. Summer	research rotation			
2 <sup>nd</sup> yr. Fall	elective, 4 units	elective, 4 units	EHS 298, 2 units	EHS 299, 4 units
2 <sup>nd</sup> yr. Winter	elective, 4 units	elective, 4 units	EHS 298, 2 units	EHS 299, 4 units
2 <sup>nd</sup> yr. Spring			EHS 298, 2 units	EHS 299, 10 units
2 <sup>nd</sup> yr. Summer	Comprehensive exam	Preadvancement meeting		
Yr 3	Qualifying exam		EHS 298, 2 units	EHS 299, 10 units
Yrs 4-5	yearly progress meeting with dissertation committee		EHS 298, 2 units	EHS 299, 10 units

Exposure Sciences & Environmental Epidemiology Track				
1 <sup>st</sup> yr. Fall	PUBHLTH 206A, 4 units	PUBHLTH 204, 4 units	EHS 202 , 4 units	EHS 299, 2 units
1 <sup>st</sup> yr. Winter	EHS 264, 4 units	PUBHLTH 283, 4 units	PUBHLTH 204B or elective, 4 units	EHS 264, 4 units
1 <sup>st</sup> yr. Spring	EPIDEM 275, 4 units	elective, 4 units	EHS 298, 2 units	EHS 299, 2 units
1 <sup>st</sup> yr. Summer	research rotation			
2 <sup>nd</sup> yr. Fall	elective,4 units	elective, 4 units	EHS 298, 2 units	EHS 299, 4 units

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2 <sup>nd</sup> yr. Winter	EPIDEM 205, 4 units	PUBHLTH 204B or elective,4 units	EHS 298, 2 units	EHS 299, 4 units
2 <sup>nd</sup> yr. Spring			EHS 298, 2 units	EHS 299,10 units
2 <sup>nd</sup> yr. Summer	Comprehensive exam	Preadvancement meeting		
Yr 3	Qualifying exam (summer)		EHS 298, 2 units	EHS 299 10 units
Yrs 4-5	yearly progress meeting with dissertation committee		EHS 298, 2 units	EHS 299, 10 units

# **Requirements for the Degree of Master of Science in Environmental Health Sciences**

Requirements for the M. S. degree may be satisfied in one of two ways. Under Plan I, the student completes the Environmental Health Sciences core program with an average grade of B or above and under the direction of a faculty advisor also prepares a thesis that is acceptable to the thesis committee. Under Plan II, the student completes the core program, prepares a scholarly paper based on individual study in an area of toxicology or population-based environmental health sciences under supervision of a faculty member, and satisfactorily passes the written comprehensive examination at the M.S. level.

### **Plan I and Plan II**

All students are assigned a first year advisor based on their expressed academic interests. The first-year advisor meets quarterly with the student, providing guidance about required and elective courses, monitoring progress on course work, and finding a research mentor, if applicable.

The first-year MS students in Plan I are expected to get involved in a research project at the earliest possible time, usually in the first quarter of the program. When a student is unsure of where to work, that student is encouraged to take advantage of the research rotation option. A rotation will consist of up to one quarter residence in a laboratory/research group of the student's choice; two or more rotations per academic year are possible. Professors will be responsible for acting as an advisor/mentor to the student and instructing the student in proper research procedures, experimental design, and data analysis/scientific interpretation. If the entering student is sure of the area in which he/she wants to work, a research rotation is not necessary.

The first-year MS student in Plan II is expected to get involved in individual study of a specialty area in environmental health sciences at the earliest possible time, usually in the first quarter of the program. The student works under the supervision of a faculty member, who is generally also their first year advisor, and is given credit for this work under course EHS 290 Independent Study in Environmental Health Sciences. The product of this independent study is the scholarly paper. The comprehensive examination is always held at the beginning of summer quarter.

Residence Requirement: 3 quarters for MS students

Language/Alternate Skills Requirement: None.

Teaching Requirement: None.

**Plan I** - The number of units required for the Environmental Health Sciences M.S. degree in Plan I is 20 program-wide core course units, at least 8 seminar (EHS 298) course units, and 8 units of approved electives for a total of 36 course units, plus at least 8 Research Problems (EHS 299) units.

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**Plan II** - The number of units required for the Environmental Health Sciences M.S. degree in Plan II is 20 program-wide core course units, at least 6 seminar (EHS 298) course units, and 8 units of approved electives for a total of 34 course units, plus at least 4 Independent Study (EHS 290) units.

		Core Curriculum- Plan I and Pla	n II
M.S. requir	ed core cour	ses # 1 & 2	
	Two of the f	ollowing:	
	EHS 202	Principles of Environmental Toxicology	4 units
	EHS 206 A	Target Organ Toxicology A	4 units
	EHS 206 B	Target Organ Toxicology B	4 units
A.S. requir	ed core cour	rse # 3	
	One introduc	tory statistics course:	
	PUBHLTH 20	94 Biostatistics I	4 units
M.S. requir	red core cou	rse # 4	
	EHS 264	Intro to Environmental Health Sciences*	4 units
	*EHS 270 ma background	y be substituted with the approval of the advi in environmental health sciences	sor if the student already possesses
M.S. requir	red core cou	rse # 5	
	One introduc	tory epidemiology course:	
	One introduc PUBHLTH 20	ctory epidemiology course: 06A Principles of Epidemiology Approved Electives for M.S. Studen	4 units
pproved el	One introduc PUBHLTH 20 ectives, 8 uni	tory epidemiology course: 06A Principles of Epidemiology Approved Electives for M.S. Studen ts selected from the pool below. Approved Elective Pool*	4 units
pproved el	One introduc PUBHLTH 20 ectives, 8 uni	ctory epidemiology course: 06A Principles of Epidemiology Approved Electives for M.S. Studen ts selected from the pool below. Approved Elective Pool*	4 units ts
pproved ele	One introduc PUBHLTH 20 ectives, 8 uni	ctory epidemiology course: 06A Principles of Epidemiology <b>Approved Electives for M.S. Studen</b> ts selected from the pool below. <b>Approved Elective Pool*</b> Psychosocial Occupational Epidemiology	4 units ts 4 units
pproved ele EHS 203 EHS 204	One introduc PUBHLTH 20 ectives, 8 uni	ctory epidemiology course: 06A Principles of Epidemiology Approved Electives for M.S. Studen ts selected from the pool below. Approved Elective Pool* Psychosocial Occupational Epidemiology Neurotoxicology	4 units 4 units 4 units 4 units
pproved ele EHS 203 EHS 204 EHS 212	One introduc PUBHLTH 20 ectives, 8 uni	ctory epidemiology course: D6A Principles of Epidemiology Approved Electives for M.S. Studen ts selected from the pool below. Approved Elective Pool* Psychosocial Occupational Epidemiology Neurotoxicology Inhalation Toxicology	4 units ts 4 units 4 units 4 units 4 units 4 units
pproved ele EHS 203 EHS 204 EHS 212 EHS 220	One introduc PUBHLTH 20 ectives, 8 uni	ctory epidemiology course: D6A Principles of Epidemiology Approved Electives for M.S. Studen ts selected from the pool below. Approved Elective Pool* Psychosocial Occupational Epidemiology Neurotoxicology Inhalation Toxicology Industrial Toxicology	4 units
pproved ele EHS 203 EHS 204 EHS 212 EHS 220 EHS 269	One introduc PUBHLTH 20 ectives, 8 uni	ctory epidemiology course: D6A Principles of Epidemiology Approved Electives for M.S. Studen ts selected from the pool below. Approved Elective Pool* Psychosocial Occupational Epidemiology Neurotoxicology Neurotoxicology Inhalation Toxicology Air Pollution, Climate and Health	4 units ts 4 units
pproved ele EHS 203 EHS 204 EHS 212 EHS 220 EHS 269 EHS 294	One introduc PUBHLTH 20 ectives, 8 uni	tory epidemiology course: D6A Principles of Epidemiology Approved Electives for M.S. Students ts selected from the pool below. Approved Elective Pool* Psychosocial Occupational Epidemiology Neurotoxicology Inhalation Toxicology Industrial Toxicology Air Pollution, Climate and Health Occupational Health Psychology	4 units ts 4 units
pproved ele EHS 203 EHS 204 EHS 212 EHS 220 EHS 269 EHS 294 EPIDEM 24	One introduc PUBHLTH 20 ectives, 8 uni	tory epidemiology course: OGA Principles of Epidemiology Approved Electives for M.S. Students ts selected from the pool below. Approved Elective Pool* Psychosocial Occupational Epidemiology Neurotoxicology Neurotoxicology Inhalation Toxicology Industrial Toxicology Air Pollution, Climate and Health Occupational Health Psychology Toxic Chemicals in the Environment	4 units  4 u
pproved ele EHS 203 EHS 204 EHS 212 EHS 220 EHS 269 EHS 294 EPIDEM 24 PUBHLTH	One introduc PUBHLTH 20 ectives, 8 uni 44 206B	Approved Electives for M.S. Students Approved Electives for M.S. Students ts selected from the pool below. Approved Elective Pool* Psychosocial Occupational Epidemiology Neurotoxicology Neurotoxicology Inhalation Toxicology Industrial Toxicology Air Pollution, Climate and Health Occupational Health Psychology Toxic Chemicals in the Environment Intermediate Epidemiology	4 units ts 4 units 4 u
pproved ele EHS 203 EHS 204 EHS 212 EHS 220 EHS 269 EHS 294 EPIDEM 24 PUBHLTH PUBHLTH	One introduc PUBHLTH 20 ectives, 8 uni 44 206B 206C	tory epidemiology course: D6A Principles of Epidemiology Approved Electives for M.S. Students ts selected from the pool below. Approved Elective Pool* Psychosocial Occupational Epidemiology Neurotoxicology Neurotoxicology Neurotoxicology Inhalation Toxicology Inhalation Toxicology Air Pollution, Climate and Health Occupational Health Psychology Toxic Chemicals in the Environment Intermediate Epidemiology Advanced Epidemiological Methods	4 units  4 u

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PUBHLTH 208	Advances in Social Epidemiology	4 units
PUBHLTH 209	Methods of Demographic Analysis	4 units
PUBLTH 211A	Latinos/Latinas and Medical Care: Contemporary Issues	2 units
PUBLTH 211B	Latinos/Latinas and Medical Care: Contemporary Issues	2 units
PUBHLTH 222	Health Policy and Management	4 units
PUBHLTH 223	Risk Communications	4 units
PUBHLTH 241	Environmental Policy and Global Sustainability	4 units
PUBHLTH 260	Human Exposure Assessment	4 units
PUBHLTH 281	Infectious Disease Epidemiology	4 units
PUBHLTH 283	Geographic Information Systems	4 units
PUBHLTH 286	Adanced GIS and Spatial Epidemiology	4 units
EPIDEM 205	Environmental Epidemiology	4 units
EPIDEM 232	Chronic Disease Epidemiology	4 units
MOL BIO 203	Structure/Biosyn. Nucl. Acids	4 units
MOL BIO 204	Structure/Biosyn. of Proteins	4 units
DEV BIO 231B	Cell Biology	4 units
PATH 225	Molecular Mechanisms of Disease	3 units
STAT 203	Statistical Methods for Data Analysis III	4 units
Anatomy 203A,B	Human Microscopic Anatomy	6 units
Physiology 206A,B	Introduction to Medical Physiology	11 units

\* Additional courses may be added to this pool upon approval of the Program Faculty.

### **Advancement to Candidacy**

**Plan I -** The Masters student is required to write a thesis based on a research problem the student has worked on under faculty supervision in the area of Environmental Health Sciences. The first-year student in Plan I is expected to get involved in a research project at the earliest possible time, usually in the first quarter of the program. When a student is unsure of where to work, that student is encouraged to take advantage of the research rotation option. A rotation will consist of up to one quarter residence in a laboratory/research group of the student's choice.

A committee of three faculty members recommended by the faculty advisor and/or the Graduate Director and officially appointed by the Dean of Graduate Studies is appointed to guide the student through the research problem and determine when a sufficient amount of work has been completed satisfactorily. At that time, the student presents the research results to the committee; after successful presentation of the results, the student can advance to candidacy for the Master of Science degree. **The student must advance to candidacy no later than one quarter before the quarter in which the degree is expected to be awarded. The deadline for submitting the advancement to candidacy form is 30 days before the**  **opening of the quarter in which the degree is expected to be awarded.** The student should be in continual contact with the committee as the work progresses to ensure prompt completion of an appropriate thesis. All three members of the committee must approve the thesis and sign the title page of the approved final version. After the committee has approved the thesis, the thesis must be submitted electronically or as a paper copy. The final copies of the thesis must be accepted before the degree can be conferred. Copies of the *Standard and Procedures Manual*.

Plan II - The Master's student in Plan II is required to write a scholarly paper based on individual study the student has done under faculty supervision; while writing the scholarly paper, the student enrolls in EHS 290 (usually 4 units during Spring quarter of year 1, with completion of the paper during summer of year 1). The student must also pass a written comprehensive examination based on the required course work, which is scheduled early during summer quarter of year 1. After completion of the examination, the student can advance to candidacy for the Master of Science degree. The student must advance to candidacy no later than one quarter before the quarter in which the degree is expected to be awarded. The deadline for submitting the advancement to candidacy form is 30 days before the opening of the quarter in which the degree is expected to be awarded. This Plan requires 4 quarters to complete (Fall, Winter, Spring, and Summer quarter).

Details on the permissible composition of the thesis advancement committee for Plan I and general rules on Plan II can be found in <u>Graduate Division's Policies and Procedures Handbook</u>.

### Seminar

The Environmental Health Sciences Seminar (EHS 298) is a required course for each graduate student in the program for each quarter the student is in residence. The seminar is organized by the faculty and graduate students and features one speaker discussion leader on Fridays at 3:30 p.m. during fall, winter and spring quarters. This is the one opportunity on a weekly basis that brings the faculty and students together, and all students in the program are required to attend all EHS 298 seminars and to take active parts in the discussions. Faculty are also expected to attend seminar. Individual presentations last about one hour; each masters' student will present a seminar **once** a year. For first year masters students the subject of the seminar should be on a topic in toxicology in which they have special interest but not a report of their own ongoing research. Senior graduate students can make their research efforts the subject of one of their seminar presentations each year. The student's grade (A, B, etc) for seminar will be based on the student's attendance, participation in the discussions, and presentation during quarters in which the student presented. Presentation criteria include:

- 1. Ability to analyze environmental health problems rather than merely describe them
- 2. Thoroughness with which the topic was reviewed and presented
- 3. Ability to respond adequately to questions from the audience
- 4. Ability to communicate one's ideas, i.e. a clear and interesting presentation, including public speaking skills and illustrations (slides, etc.)

Students should follow the steps below in preparing their seminar presentations.

- 1. Select the topic carefully; consult with the seminar coordinator (Dr. Luderer), your research advisor and other faculty members if you need help choosing a topic. The topic must be in the areas of toxicology, exposure sciences, or risk assessment, should be based on scientific evidence, and should be analytical ('why is something toxic; ''what is the scientific evidence that something causes a specific response') rather than descriptive ('compound A causes renal damage'). Stress mechanisms of toxic action or exposure pathways, integrate exposure and toxicity wherever possible.
- 2. Begin preparing early; it can take up to 50 hours to prepare an excellent presentation.
- 3. Do a literature search to make sure you have covered all the pertinent areas.
- 4. Read all of your material before writing your presentation; take notes and make outlines. Ask yourself questions; this may suggest further searching of the literature.

- 5. Integrate your material and decide what information you want to present, what order you want to use to present your material, and how you are going to present it (verbally, slide with text or table or graph or photograph, etc). Select a few key articles and present and discuss data from those articles to make key points.
- 6. Write out your presentation.
- 7. Consult with a faculty member to make sure you are on the right track.
- 8. Prepare your PowerPoint presentation.
- 9. Practice giving the presentation.
- 10. Don't read from notes; use your graphic material as 'cue cards'.

### **Comprehensive Examination**

A written comprehensive examination is given by the Environmental Health Sciences faculty. The examination evaluates the student's knowledge of the fields covered by the core courses. The student must demonstrate competence in the core subjects. All program faculty members can participate in preparing examination questions, but generally only those who have taught in the core courses do so. The comprehensive examination is open book/open note. A scientific calculator is permitted, but laptops and other electronic devices are not permitted. The exam is given in two days for a total of ten hours, with 5 problems each day. Students are required to answer at least 6 of the 10 questions. Responses are graded pass/fail. The student about to take this examination is encouraged to consult faculty to get an idea of the nature of the examination and sample questions. Students narrowly failing the examination will be permitted to retake the examination within 2 months. Failure on the second attempt of the retake leads to disqualification from the MS program.

After completion of the examination, the student can advance to candidacy for the Master of Science degree. The student must advance to candidacy no later than one quarter before the quarter in which the degree is expected to be awarded. The deadline for submitting the advancement to candidacy form is 30 days before the opening of the quarter in which the degree is expected to be awarded. This Plan requires 4 quarters to complete (Fall, Winter, Spring, and Summer quarter).

# **Environmental Health Sciences Course Descriptions**

#### EHS 201: Case Studies in Environmental Toxicology (4) S

Interactive case studies in environmental toxicology. Prerequisite: EHS 206A-B, or consent of instructor. (Staff)

#### ESH 202: Principles of Environmental Toxicology (4) F

Key principles of toxicology will be discussed: quantitative dose-response relationship; toxicant-target interactions; complete in vivo metabolism of xenobiotics by mammalian systems; integration of organ responses to toxic agents.(Kitazawa)

#### EHS 203: Psychosocial Occupational Epidemiology (4) W

Critical review of the internal and external validity of epidemiological studies on psychosocial work environment and diverse health outcomes. Students are required to submit critical reviews on assigned papers. (Choi)

#### EHS 204: Neurotoxicology (4) F, even years

The effects of various harmful chemicals upon nervous system function. Emphasis given to the molecular events underlying neurological damage and to the relation of such processes to basic mechanisms of neurobiology. (Bondy)

#### EHS 206A/B: Target Organ Toxicology (4,4) W,S

Analysis of the responses occurring in individual organs of man and animals exposed to environmental chemicals at toxic levels; distinctive structural and functional features of ten organ systems are presented in terms of phenomena, mechanisms of action, and methods of study. (Staff)

#### EHS 212: Inhalation Toxicology (4) W, even years

The principles and practice of laboratory inhalation toxicology. Topics include aerosols, gases, respiratory tract structure and function, lung defenses, aerosol deposition exposure techniques, characterization of exposure atmospheres, experimental designs, animal models, research ethics, and regulations and guidelines. (Phalen)

#### EHS 220: Industrial Toxicology (4) S, odd years

Analysis of responsibilities toxicologists have in industry, including product safety generating material safety, data sheets, animal testing, ecotoxicological testing, risk/hazard communication, and assisting industrial hygienists and occupational physicians; emphasis on interdisciplinary nature of industrial toxicology and communication skills. Prerequisite: TOX 206A-B. (Lambert)

#### EHS 264: Environmental Health Sciences I: Introduction to Environmental Health Science (4) W

Convergence of agents (chemical, physical, biological, or psychosocial) in the environment can emerge as diseases influenced by social, political, and economic factors, allowing them to become rooted in society. How these agents from various spheres come together and impact human health. Prerequisite: graduate standing or consent of instructor. Same as Public Health 264/Epidemiology 264. (Wu)

#### EHS 269: Air Pollution, Climate, and Health (4)

Emission of air pollutants into the atmosphere, physical and meteorological processes that affect transport, and influence on global warming. Concepts of how and where people are most exposed, and how exposures and health effects differ in developed and developing regions. Same as Epidemiology 270/Public Health 269. (Wu)

#### EHS 270: Human Exposure to Environmental Contaminants (4)

Introduces founders of conceptual thought that environmental contaminants can impact health. Theory and principles of exposure assessment, the continuum from emissions of a contaminant into the environment to evidence of health effects in a population. Same as Epidemiology 270/Public Health 270. (Edwards)

#### EHS 275: Environmental Modeling and Risk Assessment (4) S, odd years

This course surveys the general principles, basic mathematical methods, and practices of environmental modeling and human health risk assessment. Topics include advection-dispersion models for contaminants in air and water, uptake by plants and animals, dose-response modeling, risk management, and risk perception. Although the emphasis is on environmental toxicants, infectious disease transmission models are briefly introduced. Students conduct an original risk assessment as a final group project. Same as Public Health 275 (Bartell).

#### EHS 290: Independent Study in Environmental Health Sciences (2-12) F,W,S

With consent from a faculty member who will supervise the program, a student may receive credit for individual study in some area of toxicology, culminating in the completion of a scholarly paper on the subject. May be repeated for credit. (Staff)

#### EHS 294: Health Psychology (4) F, odd years

Focus on theory and research in health psychology as applied to major acute, chronic, and occupational health problems. Adopting the biopsychosocial model of health, emphasis is on understanding and influencing how biology, behavior, and the environment influence health and illness. (Hoyt)

#### EHS 297: Advanced Topics in Occupational Toxicology (2) F,W,S

Discussions with clinical and research faculty in Environmental Health Sciences and occupational medical on current toxicology problems in the workplace and critical review of current publications in the field. Journal club/seminar format. (Khan).

#### EHS 298: Environmental Health Sciences Seminar (2) F,W,S

Presentation and discussion of current research problems and issues by students, postdoctoral fellows, faculty, and guests, covering the broad research and policy areas of Environmental Health Sciences. (Luderer)

#### EHS 299: Research Problems (1 to 12) F,W,S

Research work for the M.S. thesis or Ph.D. dissertation. (Staff)

### Graduation & Diploma Information (Ph.D. & MS)

A student who expects to complete all requirements for an advanced degree in a given quarter must be advanced to candidacy for that degree 30 days prior to the first day of the quarter in which the degree will be conferred. Students must complete the Graduate Student Diploma and Commencement form and are responsible for providing accurate information that will be printed on their diploma and in the commencement program.

Questions regarding eligibility to participate in spring commencement and the logistics of commencement exercises should be directed to the Office of Graduate Studies, and the Commencement Office.

### **Important Filing Deadlines**

With any milestone such as advancement or dissertation/final degree, it is important to meet with the Assistant Director of Graduate Affairs at least one quarter prior to discuss administrative processes and perform internal degree audits. Use the <u>Advising Appointment System</u> or email to schedule. All DocuSign documents will be initiated by the Assistant Director of Graduate Affairs.

The filing deadlines will vary every academic year, so be sure to check <u>Graduate Division's resources and</u> <u>calendars</u>.

Final Degree Paperwork		
Fall 2022	December 2, 2022	
Winter 2023	March 17, 2023	
Spring 2023	June 9, 2023	
Summer 2023	September 8, 2023	

#### NO EXCEPTIONS ALLOWED

To meet the final degree deadline, all final degree paperwork must be submitted to Graduate Division by 5pm on the filing deadline.

Advancement Deadline (Ph.D. & MS)		
Fall 2022	December 9, 2022	
Winter 2023	March 24, 2023	
Spring 2023	June 16, 2023	
Summer 2023	September 22, 2023	

For questions or more information, <u>email the EHS Department</u> or call 949-824-1244

PROGRAM IN PUBLIC HEALTH

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### Grants, Awards, & Scholarships

EHS students are eligible to apply for prestigious Association of Schools and Programs of Public Health (ASPPH) internships and fellowships while enrolled and post-graduation. Start an ASPPH Fellowship application <u>here</u> and sign up for ASPPH's weekly newsletter <u>here</u>.

# Academic Requirements, Policies, & Procedures

### **Continuous Enrollment Policy**

For fall, winter, and spring quarters, enrollment in:

- 12.0 units or more is considered full-time status
- 0.5 8.0 units is considered half-time status

## Advisors

The graduate school experience is about more than just academics. Pursuing a graduate degree while managing work, family, and a social life is not easy, and you may feel overwhelmed at times. The good news is that the faculty and staff of the Program in Public Health are committed to your success as a student and a future public health professional. Your advisors can address issues of school/life/work balance, career goals, long-term educational goals, getting involved in the university, and much more. The best place to start if you need help is with Program in Public Health Graduate Student Affairs Office. They can provide you with information about campus resources or identify Public Health faculty and staff who can answer your questions about life during and after graduate school. You may also reach to <u>Graduate Division staff</u> additional support.

<b>UCI Graduate Division</b>	
Office: 120 Aldrich Hall	
Telephone: 949-824-4611	
Email: <u>grad@uci.edu</u>	

### **Department Chair**

The Department Chair is a faculty member who serves as the academic leader and administrative head of the department. The Chair should be receptive to questions, complaints, and suggestions from members of the department, both faculty and staff personnel, and from students, and should take appropriate action on them.

### **Faculty Mentor**

Each EHS student is assigned to a Faculty Mentor. Your Faculty Mentor will advise you on broader educational and career goals and assist with the selection of core and elective courses each quarter.

### **Graduate Student Advisor**

The Graduate Student Advisor tracks degree progress, advises students about program requirements, assigns teaching assistant and reader positions, and refers questions to other staff, faculty, or campus services.

### **CEPH Competencies & Course Learning Outcomes**

The Program in Public Health is fully accredited by the <u>Council on Education for Public Health (CEPH)</u> and is a member of the <u>Association of Schools and Programs of Public Health (ASPPH)</u>. Click the hyperlinks for more information on CEPH and ASPPH.

### **Standards for Normal Academic Progress**

In accordance with the policies of the Graduate Council, the Program in Public Health has set normative and maximum times to degree for the EHS program. The normative time is the average or expected amount of time it will take a student to complete the degree, and the maximum time is the most amount of time we can allow students to complete the degree.

	Normative Time	Maximum Time
MS (Plan 1)	5 quarters	7 quarters
MS (Plan II)	4 quarters	
PhD	5 years	7 years

### **Academic Probation & Disqualification**

Students may be placed on academic probation for unsatisfactory progress toward the completion of degree requirements. Unsatisfactory progress may include, but not be limited to the following:

- 1. an overall grade point average below 3.0;
- 2. failure to complete courses or examinations satisfactorily within the period of time specified by the graduate program;
- 3. failure to pass a required examination in two attempts.

The Director of Academic Affairs or Graduate Student Affairs Officer may initiate procedures to place the student on academic probation. In such cases the student typically will receive written notice of the deficiencies and a deadline for remedying these deficiencies (i.e., for completing specific degree requirements). Failure to meet this deadline can result in a petition to the Dean to terminate the student from graduate study in the program.

### **Enrolling in Excess Units**

If you wish to enroll in more than 16 units per quarter, you must obtain advance approval from your Faculty Mentor and the Assitant Director of Graduate Affairs. To start the process, please print and fill out the EHS Petition for Exception and the Academic Planner. Both forms are available on our website. The main purpose of the planner is to show your mentor how many units you intend to take each quarter and not the exact titles of the courses. Your faculty mentor will discuss with you the appropriateness of your plan and make sure you understand the rigorousness of taking excess units. The petition only needs to be filled out once, even if you enroll in excess units over multiple consecutive quarters. If your cumulative GPA falls below a 3.0, you will not be allowed to enroll in excess units in any subsequent quarters until you have returned to good academic standing. Students will be informed if their schedules need to be changed as a result of poor grades from the previous quarter. You will be notified of the results of your petition by email if the petition is not approved. If your petition is approved, the Graduate Student Affairs Office will increase your unit limit in the enrollment system.

### **Graduate Assistantships**

Many academic units offer research assistantships to outstanding graduate students, either as Graduate Student Researchers (GSRs) or Graduate Student Assistant Researchers (GSARs). During the academic year, GSRs and GSARs may be appointed for a maximum of half-time service (220 hours/quarter). Registration as a full-time student (12 units) is required, and students must meet academic eligibility requirements for grades, GPA and satisfactory progress. The duration and extent of such appointments vary by academic unit. Students should contact their departments for further information.

#### Graduate Student Researcher (GSR)

An academically qualified and registered graduate student, enrolled full-time, who performs research related to their degree program in an academic department or research unit under the

Please visit Important Information for GSRs and updates regarding GSR rights & FAQs.

#### **Teaching Assistantships**

Graduate students in Environmental Health Sciences are eligible for teaching assistantships in the Program in Public Health, or the School of Biological Sciences if their units are not able to fill all of their teaching assistantship positions with their own graduate students.

#### **Academic Requirements**

- A minimum GPA of 3.0
- Satisfactory academic progress towards degree objective
- A letter grade of C, S, or above in all courses completed in the last three quarters
- $\circ~$  No more than two (2) Incomplete grades (except where stricter school policies apply) in the last three quarters

#### **GSR Appointment Benefits**

Payment of Fees/Tuition (Remission)

Campus policy regarding GSR/GSAR fee and tuition remission applies to all students employed in the GSR/GSAR series with an appointment of at least 25% time for the entire quarter. Each eligible student's total assessed fees/tuition (and non-resident supplemental tuition, if applicable), must be paid as a condition of their GSR/GSAR appointment. Charges are to be debited directly to applicable extramural awards or other funding source(s) paying the student's salary when the student registers each quarter.

Please refer to Registrar's site for the <u>Schedule of Fees/Tuition</u>.

### **Leave Guidelines**

An academic leave of absence (LOA) is intended to cover the temporary interruption of the student's academic program. The reason(s) for requesting a LOA must be consistent with University policy and guidelines, and with the guidelines of the student's academic program. Students who are considering an academic leave of absence should consult with the Assitant Director of Graduate Affairs.

### **Academic Integrity**

### Academic Standards

The following excerpt is taken from the UCI General Catalogue on Scholastic Requirements for Graduate Students:

A graduate student is expected to make satisfactory progress toward an approved academic objective, as defined by the faculty of the program in accordance with policies of the Graduate Council, to maintain a satisfactory grade point average for all work undertaken while enrolled in graduate study, and to maintain academic progress within the required time to degree as established by the respective academic program. Satisfactory progress is determined on the basis of both the recent academic record and overall performance. A graduate student normally is expected to complete satisfactorily at least eight units of academic credit applicable to the graduate program in each regular academic session (unless on an approved leave of absence), and satisfy all requirements of the academic program according to an approved schedule. For a graduate student, only the grades A+, A, A-, B+, B, and S represent satisfactory scholarship and may be applied toward advanced degree requirements. However, a UCI course in which a grade of B- is earned may be accepted, via a formal petition process, in partial satisfaction of the degree. Graduate students may not apply courses graded Pass/Not Pass toward any degree or satisfactory progress requirements. A grade point average below the B level (3.0 on a 4.0 scale) is not satisfactory, and a student whose grade point average is below that level is subject to academic disqualification.

A student's academic progress ordinarily is evaluated on the basis of the academic record, time-to-degree, and the professional judgment of the faculty. A few weeks after the end of a quarter, an updated copy of each enrolled student's permanent academic record is available from the Registrar. This record lists all UCI courses for which a graduate student was enrolled (including courses taken through the Intercampus Exchange Program), the grades assigned, and the cumulative grade point average. This record also includes formal candidacy for an advanced degree, degrees conferred, certain examinations passed, unit credit accepted from other institutions, and other important academic information.

A graduate student who has not demonstrated satisfactory academic progress is not eligible for any academic appointment such as Reader, Tutor, Graduate Student Researcher, Teaching Associate, or Teaching Assistant, and may not hold a fellowship or other award which is based upon academic merit.

### Academic Honesty

The following excerpt from Graduate Policies and Procedures explains the university's position on academic honesty. We <u>strongly</u> recommend that you familiarize yourself with the academic dishonesty policies and procedures. The policies apply equally to electronic media and print, and involve text, images, and ideas. The policy in its entirety can be found here.

The consequences of failing to uphold the academic honesty policy are published in the *UCI General Catalogue*, <u>and are also available here</u>.

Students are expected to become familiar with this policy. Students who fail to uphold their fundamental academic obligation are subject to consequences that might range from lowering a grade to campus-wide sanctions, up to and including dismissal. Examples of conduct that fall under the aegis of the policy on academic honesty include, but are not limited to, plagiarism, cheating, stealing of exams, falsifying the record of their work, or collusion in such dishonest activities. When faculty suspect academic dishonesty, they need to follow due process guidelines and investigate their suspicions promptly and fairly. Minimally, due process requires that suspected students be given clear and prompt notice of the suspicion and the opportunity to confront or rebut the evidence that gave rise to the suspicion. Some procedures for implementing the policy can also be found in the UC-UCI document *Policies Applying to Campus Activities*, *Organizations, and Students*.

# Learn at UCI

### **University Library**

The <u>UCI Libraries website</u> is a great place to start to learn about the range of services that we offer, specific <u>services and resources available during COVID-19</u> curtailments, and our overall <u>phased reopening plan</u>. Highlights include:

- <u>Reservable study space</u>, in the Science Library Multimedia Resources Center and Libraries Gateway Study Center, including a variety of seating options (individual study rooms, computer workstations, socially distanced seating at tables and carrels).
- Increased access to digital library resources for those studying remotely or unable to visit the Libraries.
- <u>Curbside delivery and pick-up options</u> at Langson Library for some physical materials that cannot be accessed in a digital format.
- Remote assistance from expert librarians by <u>chat, email</u>, or scheduled in-depth <u>Research</u> <u>Consultations</u>.
- <u>Remote reference and digitization of Special Collections and Archives materials</u>.

You are encouraged to contact <u>your Subject Librarian</u> for assistance if you encounter any challenges accessing the resources that you need for teaching, learning, or research.

#### Public Health Librarian Hector Perez Office: 232 Science Library Telephone: 949-824-6957 Email: perezhr@uci.edu

### **Career Development Service**

There are multiple career development resources available at UCI. The academic department frequently emails unsolicited job listings to students and helps arrange talks from local public health agencies and private companies. The UCI Career Center has a dedicated career advisor for graduate students, though you are welcome to see any of the career advisors for assistance. The Career Center also offers mock interviews on camera, resume assistance, and workshops on the job search process.

**Graduate Career Educator** Lauren Lyon Office: 100 Student Services 1 Telephone: 949-824-6881 Email: lauren.lyon@uci.edu

### **IT Services**

Not having the right equipment to access your coursework can make them even more difficult. To help alleviate the challenge of securing appropriate computer equipment for remote learning, <u>UCI has secured a number of laptops for free loan</u> during each quarter to students who don't have access to key remote learning tools.

### Graduate & Postdoctoral Scholar Resource Center

The <u>GPSRC</u> offers workshops and programs designed to support professional development; writing support; communication; preparation of grant and fellowship funding applications; wellness and work-life balance; mentoring and much more! Programs are open to all domestic and international Graduate Students and Postdoctoral Scholars, free of cost.

Students may schedule <u>1-1 appointments</u> with writing consultants to review academic writing (publications, dissertation/thesis, conference papers, etc.), funding applications including grants and fellowships and job application materials. <u>Certificate programs</u> are offered through out the years to help students improve communication and mentoring skills.

Graduate and Postdoctoral Scholar Resource Center Office: 3100 Gateway Study Center Telephone: 949-824-2207 Email: gpsrc@uci.edu

# **Financial Support**

### **Tuition & Housing**

All tuition, fees, and charges are subject to change without notice, and the University may impose additional tuition and fees. Consult the <u>University Registrar's website</u> for the most up-to-date information. Graduate student tuition <u>information about tuition can be found here</u>.

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More than 14,000 students choose to live on campus to take advantage of award-winning facilities, access to convenient campus resources. <u>Housing information can be found here</u>.

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### **Financial Aid**

Graduate students seeking information about receiving financial support are strongly encouraged to speak with the academic departments or professional school to which they have applied and/or been admitted. To be considered for the specific federal loan programs listed below, all *domestic* (e.g., non-foreign) graduate students must complete the <u>Free Application for Federal Student Aid (FAFSA)</u>.

<u>Financial Aid Counselor</u> Roman Cardona	
Office: 102 Aldrich Hall	
Telephone: 949-824-0290	
Email: <u>rcardon1@uci.edu</u>	

#### Need-based Aid and Loans

Need-based aid and loans can come from private organizations or from the government. Banks can provide private loans and organizations may offer need-based scholarships for exceptional students. Applicants wishing to receive need-based aid (including government aid and/or federally subsidized loans) must fill out a FAFSA form. You must fill out the <u>FAFSA</u> by the California priority deadline to receive full consideration for many forms of aid, including scholarships and UCI Grants. It is strongly recommend that you fill out a FAFSA even if you do not think you are eligible for aid. International students will not be able to complete the online FAFSA, but should inquire with the department and our Financial Aid Officer after admission. While international students are not eligible for federal financial aid, they may be eligible for certain types of university fellowship funding, departmental awards, and/or employment as a teaching assistant or graduate student researcher.

#### **Fellowships and Grants**

Fellowships and grants are awards that do not have to be paid back. The award can be institutional (offered by the university or by the Program in Public Health) or "portable" (external funding offered by an organization or agency). Many deadlines for fellowships and grants occur early in the academic year, so it is important to prepare your materials in advance and apply early. For departmental grants, the Graduate Student Affairs Officer will notify you of any deadlines and application procedures.

We also suggest that <u>students visit this page</u> on financing your degree from the Association of Schools and Programs of Public Health.

### **Campus Employment**

The Graduate Division restricts all on-campus employment for graduate students (including staff employment) to 50% or less time while enrolled full-time. Part-time students are allowed to work 25% time or less. Exceptions to this policy are rarely approved by the university. Limitations to on-campus employment for graduate students are explained in further detail on page 33 of the Graduate Policies and Procedures handbook. Students employed by the University of California who are interested in applying for a reduced fee waiver should pay special attention to the employment limitations.

You may also wish to pursue part-time or full-time employment to help pay for school. If you wish to work full-time, we strongly encourage you to attend school part-time to ensure that you have adequate time to study for your classes. To search for jobs on- or off-campus, we recommend that you try ZotLink, the job listings database of the UCI Career Center. You must be a current student and have a UCInetID login to

search the database. On-campus jobs are conveniently located and may be more willing to accommodate your course schedule. There are also a number of off-campus public health-related organizations and businesses in Orange County that may be able to provide you with employment opportunities.

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# Safety & Security

### Speech & Advocacy

The University is committed to assuring that all persons may exercise the constitutionally protected rights of free expression, speech, assembly, and worship. <u>Please read the full policy here</u>.

### **Nondiscrimination Policy**

The University is committed to a policy against legally impermissible, arbitrary, or unreasonable discriminatory practices. All groups operating under the authority of The Regents, including administration, faculty, student governments, University-owned residence halls, and programs sponsored by the University or any campus, are governed by this policy of nondiscrimination. The intent of the University's policy on nondiscrimination is to reflect fully the spirit of the law. In carrying out this Policy, the University also shall be sensitive to the existence of past and continuing societal discrimination. <u>Please read the full policy here</u>.

### **Disability Statement**

The University of California, Irvine, is committed to providing a barrier-free environment for learning and an electronic environment that is accessible to everyone, including individuals with disabilities. If you have a disability and feel you need accommodations in this program or a course, please contact the <u>Disability</u> <u>Services Center</u> (DSC). DSC approved accommodations will be provided for students who present a Faculty Notification Letter from the DSC.

### **Diversity Statement**

The University of California, Irvine, in accordance with applicable Federal and State law and University policy, does not discriminate on the basis of race, color, national origin, religion, sex, gender identity, pregnancy, physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services. The University also prohibits sexual harassment. This nondiscrimination policy covers admission, access, and treatment in University programs and activities.

### **Counseling Services**

The Counseling Center is the primary counseling and mental health agency for UC Irvine students. The Center strives to assist students with their academic success by developing dimensions of well-being. The Counseling Center provides short term time limited individual, couples, group and family counseling. The Center also assists students with urgent care and some psychological testing. Psychiatric evaluation and intervention are available on a limited basis for students concurrently seen in therapy. A wide range of workshops and courses related to interpersonal and developmental issues including cross cultural interaction, intimacy and friendships, interpersonal communication, and coping and resiliency are offered annually.

In addition, the Counseling Center provides support to the University community through crisis intervention, training regarding mental health issues, and outreach and consultation services. The Center's services are available and free of charge to currently registered students. Students with chronic and severe mental health issues needing long term and extensive services are referred to other appropriate community providers.

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#### Counseling Center Office: 203 Student Services 1 Telephone: 949-824-6457 Website: <u>https://counseling.uci.edu/</u>

# **Grievances Policy**

The organizations listed below assist in resolving disputes within the University community:

- Office of Graduate Studies: gives guidance on formal and informal methods of resolving conflicts.
- UCI Ombudsman: independently, objectively, and confidentially assists in mediating and resolving conflicts.
- UCI Mediation Program: a volunteer program for dispute resolution, facilitated through the Ombudsman Office.
- UAW (International Union, United Automobile, Aerospace and Agricultural Implement Workers of America [UAW] AFL-CIO and its Local Union 2865) represents UCI graduate students that have teaching assistantship, reader, or tutor appointments (whether or not they are members of the union).
- UCI Dean of Students: investigates allegations of physical abuse, threats of violence, or conduct that threatens the health or safety of any person or university property.

Problems relating to academic policies should be resolved at the level of the academic unit where possible. If this is not possible, such problems should be addressed in accordance with the Student Academic Grievance Procedures.

# **Campus Organizations**

As a graduate student in the Program in Public Health, there are numerous opportunities available for you to become involved in the university and in your home department. We know that many of you were active in community service and school organizations at your undergraduate institutions and we hope that you will continue to contribute here at UC Irvine. This guide lists just a few of the opportunities you will have to get involved and give something back to your fellow students, staff, faculty, and community.

#### **PPH Organizations**

#### **Curriculum Committee**

<u>The Curriculum Committee</u> meets periodically to plan and coordinate the Public Health curriculum and has one student member. The student member will be chosen by Public Health faculty to convey student concerns about the EHS curriculum.

#### **Graduate** Liaison

This student is elected by the graduate students each fall to represent all graduate students in the program. While we welcome feedback on our program from all students, the Graduate Liaison can bring an issue to the attention of faculty and staff if a student does not want to convey their opinion directly. The Graduate Liaison represents the students as the student member of the Graduate Committee, which oversees Public Health graduate programs, and attends monthly faculty meetings. This student also assists the department in coordinating visits from colloquium speakers if funds allow. The Graduate Liaison is elected by the end of the fall quarter.

#### **Campus Organizations**

#### **Graduate Public Health Association**

The Public Health Association (PHA) was organized by students in our undergraduate majors to promote awareness of public health issues on our campus and in the community and to educate its

#### SIPHERS (Students at Irvine Public Health Emergency Response and Surveillance)

Members of SIPHERS work closely with the Orange County Health Care Agency to provide assistance to the agency during surge periods such as outbreaks. The students periodically visit the agency during the school year to train with agency employees and attend seminars.

#### **Associated Graduate Students**

The Associated Graduate Students (AGS) is the recognized graduate student government at UCI. AGS plans social activities, advocates for graduate students in campus planning and policy, and renegotiates the GSHIP insurance plan annually. All graduate students in good standing are eligible to sit on AGS committees. The Council, the legislative arm of AGS, also has one seat available for every 100 students in each school. If you are interested in becoming a council member, <u>please send an email here</u>. The GSHIP council is an especially informative experience for those considering careers in Health Policy and Management.

# **Helpful Links**

- Graduate Department Administrators and Staff
- <u>UC/UCI Student Policy Manual (section 170.00): fees (including refund schedules), privacy policies,</u> <u>disclosure of information, "time to degree" policies</u>
- <u>UCI Associated Graduate Students: the official representative body for all graduate students and professional students at UC Irvine</u>
- <u>UCI Catalogue Appendix: information on access to, and release of, student records</u>
- <u>UCI Disability Services Center: information and assistance for students with disabilities</u>
- <u>UCI Graduate Policies and Procedures: information on academic policies and related administrative</u> procedures, including but not limited to:
  - $\circ$  academic appointments and graduate student employment
  - academic standards
  - o examinations
  - o leave of absence/part-time enrollment
  - residency issues
  - o transfer of credit
- <u>UCI Health and Wellness Services</u>
- <u>UCI International Center: information and assistance for international students, faculty, and visiting</u> <u>researchers</u>
- <u>UCI Office of Equal Opportunity and Diversity: policies and procedures regarding discrimination,</u> retaliation and sexual harassment

# **Comments & Suggestions**

Thank you for reading the EHS Student Handbook. Our goal is to make this Handbook informative and easy to use. We would appreciate any comments or suggestions that will help us to enhance this Handbook.

Please send your comments and suggestions regarding this Handbook here.

This link is only for Handbook comments. Program advice or assistance cannot be obtained from this email address.