

A long-exposure photograph of a starry night sky over a beach. The stars are captured as long, concentric white trails, creating a sense of rotation. The horizon is visible in the lower third of the image, with a faint glow from the setting or rising sun. The foreground shows the dark, textured surface of a beach.

BACHELOR OF SCIENCE in

# Public Health

*with emphasis in Environmental Health*

**SDSU** | Imperial Valley

Beginning in Fall 2024, SDSU Imperial Valley will offer a new Bachelor of Science degree in Public Health with an emphasis in Environmental Health to provide an educational opportunity in the field of public health pertinent to the existing and future needs of the area. Environmental Health is a branch of public health that studies how biological, chemical, and physical factors in natural and built environments impact human health and diseases. Students will learn how to help prevent injuries and disease by managing environmental hazards and promoting healthier air, water, soil, homes, workplaces, and communities.



The Environmental Health emphasis in Public Health will provide students with a strong science-based education with rigorous science and laboratory courses. In this program, students will demonstrate knowledge of the history and basic competencies in six major domains of public health: environmental health, health promotion and behavior, epidemiology, biostatistics, health services administration, and global health. In addition, students will learn about exposure and mechanisms by which environmental agents cause toxicity and affect human health, and explain factors (including genetic, physiological and psychosocial) that influence susceptibility to these agents.

As part of this program, students will conduct an internship with a regional agency or research project in the broader field of public health with opportunities in air pollution measurement, water pollution, toxicology, environmental justice, or occupational health with one of our faculty. Upon successful completion of the program, students will be able to enter the workforce for exciting careers in Public Health, Environmental Health, or have the opportunity to pursue a graduate education such as the Master of Public Health (MPH) degree or other health sciences related programs.

## **New \$80 Million SDSU Imperial Valley STEM Building**

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To address the economic and educational opportunities associated with the burgeoning lithium extraction boom in the Imperial Valley, the State of California approved the construction of an \$80 million building to house STEM laboratories, classrooms, and student services spaces for the new SDSU Imperial Valley Public Health with emphasis on Environmental Health major as well as future STEM related majors. Construction began in 2023 at the SDSU Imperial Valley Brawley location.

## \$15 Million NIH Award Bolsters SDSU Health Disparities Research



**SDSU FUERTE**

Faculty Unified towards Excellence in  
Research and Transformational Engagement

SDSU FUERTE (Faculty Unified towards Excellence in Research and Transformational Engagement) is a 5-year initiative funded by the NIH Common Fund designed to increase the scientific workforce diversity and support the research independence of early-stage research faculty who are committed to diversity, equity, and inclusion in biomedical science, especially faculty who are underrepresented in health science research. Four Environmental Health faculty were hired at SDSU Imperial Valley to help launch the Public Health with emphasis in Environmental Health (PH-EH) program. The current FUERTE faculty at SDSU Imperial Valley specialize in research focused on outdoor air quality monitoring and modeling (Dr. Zavala), wastewater epidemiology (Dr. Lara-Jacobo, Dr. Kaya), indoor air quality monitoring (Dr. Cheng) and risk assessment and bioremediation of contaminated sites (Dr. Kaya). All four faculty are committed to reducing health disparities and increasing health equity, mentoring undergraduate students, and growing the PH-EH program at SDSU Imperial Valley.

### Faculty Spotlight: Dr. Miguel Zavala

***“Applied public health science is one of the best ways to solve the most pressing environmental challenges in our communities.”***

Dr. Miguel Zavala is an Associate Professor in the School of Public Health at San Diego State University at the Imperial Valley campus. He received his Ph.D. in Atmospheric Sciences from the Massachusetts Institute of Technology (M.I.T.) and a M.Sc. in Environmental Sciences from the Tecnológico de Monterrey in Mexico. His research topics include air quality modeling, low cost community air sensors, emissions inventory development, source apportionment, air toxics monitoring, characterizing personal exposure and health disparities within local communities, assessing the pollution impacts of US-Mexico Ports of Entry, and others. His expertise includes the application of air quality models for understanding the physical and chemical processes that drive air pollution and the estimation of air quality and public health impacts, the evaluation of criteria, air toxics, and greenhouse gasses emissions inventories, evaluation of air quality management programs, and analysis of meteorological processes that control air pollution.



# Bachelor of Science in Public Health

*with emphasis in Environmental Health*

## MASTER PLAN

The SDSU Imperial Valley Public Health with an emphasis in Environmental Health major is offered as a transfer program only.

### Admission to SDSU Imperial Valley as a transfer student

To be admitted to the SDSU Imperial Valley as an upper-division transfer (UDT) student:

- 1. Be in good academic standing** at last college or university attended, “good standing” means you are eligible to re-enroll at your last college or university;
- 2. Have an overall college GPA of a least 2.00;** your GPA is calculated using all your transfer units attempted;
- 3. Complete a minimum of 60 semester units or 90 quarter units of transferable coursework** including 10 lower-division general education courses (30 semester units or 45 quarter units) and four basic skills courses.

### Applying to SDSU Imperial Valley (as a transfer)

- 1. Apply online at [calstate.edu/apply](https://calstate.edu/apply)** – October 1 to December 15 — Once your admission application has been submitted SDSU Imperial Valley will contact you via mail or electronic correspondence in regards to the supplemental application process.
- 2. Submit SDSU Supplemental Application:** In January, you will be invited to log back into Cal State Apply to submit SDSU’s Supplemental Application. In it, you will tell us which major preparation requirements you have already fulfilled and which are in progress.
- 3. Check Your Application Status:** Several days after submitting Cal State Apply, you will be e-mailed login credentials to access my.SDSU, San Diego State University’s applicant pool. Check your admission status weekly through my.SDSU.

# FOUR YEAR PATHWAY

## Imperial Valley College and SDSU Imperial Valley

Earn both an Associate in Science Degree in Public Health Science for Transfer (IVC) and Bachelor of Science in Public Health with emphasis in Environmental Health (SDSU-IV) in Four Years.

### YEAR 1 Imperial Valley College

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#### Fall Semester\*

- Any Area A2 course (see IVC advisor)
- BIOL 100
- CHEM 100
- COMM100
- HE 103

#### Spring Semester\*

- Any Area A3 course (see IVC advisor)
- Any Area C1 course (see IVC advisor)
- BIOL 200 or BIOL 204
- MATH 150 or 190 or 192
- POLS 110

#### Summer Semester

- PH 292: Student must cross-enroll in Online SDSU San Diego course

### YEAR 2 Imperial Valley College

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#### Fall Semester\*

- Any Area C2 course (see IVC advisor)
- BIOL 202 or 206
- CHIC 100
- PSY 101 or SOC 101
- HE 102

#### Spring Semester\*

- Any Area C1 or C2 Course (see IVC advisor)
- BIOL 220
- MATH 119
- CHEM 130: Student must cross-enroll in Online SDSU Imperial Valley course

### YEAR 3 SDSU Imperial Valley

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#### Fall Semester

- PH 300
- PH 302
- PH 307
- PH 452
- RWS 305W

#### Spring Semester

- PH 362
- PH 304
- PH 306
- PH 401

#### Summer Semester

- PH 450 (Online course)
- PH 305 (Online course)

### YEAR 4 SDSU Imperial Valley

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#### Fall Semester

- PH 451
- PH 538A
- PH 490A
- PH 490B
- PH 499 or Elective (see SDSU-IV advisor)

#### Spring Semester

- GEN S 340 (PH 340)
- MUSIC 345 or HIST 440 (or similar course)
- PH 490C
- PH 497 or 499 or Elective (see SDSU-IV advisor)

\*For IVC and SDSU-IV pathways, there is some flexibility with regard to the sequence of courses. Please consult your IVC or SDSU-IV advisor. All course schedules subject to change.

For more information, please email: [dkanaan@sdsu.edu](mailto:dkanaan@sdsu.edu)

## Public Health Minor

Students must complete 18 units (Six Courses):

Public Health Minor Required Courses: 9 Units (Three Courses)

COURSE	NAME	IMPERIAL VALLEY COLLEGE EQUIVALENT	UNITS
PH 101	Introduction to Public Health	HE 103	3*
PH 292	History of Public Health		3*
PH 302	Epidemiology – Communicable and Chronic Diseases		3

Elective Courses: 9 units (Choose three courses from any listed below)

PH 304	Environmental Health		
PH 362	International Health	Also serves as GE Explorations: Social/ Behavioral Sciences and Cultural Diversity	
Other Options	BIOL 315, GEN S 340 (PH 340) PH 300, PH 305, PH 306, PH 307, PH 451, or PH 452		

\*Available as an Online SDSU San Diego cross-enrollment course only

### Faculty Spotlight: Dr. Linda R. Lara-Jacobo



*“Nothing in life is to be feared; it is only to be understood” —Marie Curie*

Dr. Lara-Jacobo holds a Ph.D. in Toxicogenomics from the Institut National de la Recherche Scientifique, Quebec, Canada. Linda has more than ten years of research, teaching, and mentoring experience, including work with indigenous and rural communities. Her work aims to connect health, environment, gender equality, social inclusion, and diversity

towards a sustainable future. She’s also a member of the HB Women in STEMM Leadership program, acting against climate change on a global scale by observing its effects in Antarctica and increasing women’s leadership. In 2021, she received the Hispanic Women of the Year Merit Award (QC, Canada).

## Faculty Spotlight: Dr. Kai-Chung Cheng



***“Innovation begins with curiosity”***

Dr. Kai-Chung Cheng is joining SDSU Imperial Valley and the San Diego State University School of Public Health in January 2023. He received his Ph.D. degree in Civil and Environmental Engineering at Stanford University. His research focuses on developing monitoring and modeling technologies for air quality and human exposure assessments. He is interested in using wireless sensing and machine learning approaches to identify and characterize air pollution emissions. Being a new faculty member at SDSU-IV, he looks forward to working with local communities in Imperial Valley, using engineering methods to help address environmental disparities.

## Faculty Spotlight: Dr. Devrim Kaya



***‘Somewhere, something incredible is waiting to be known.’ —Carl Sagan***

Dr. Kaya holds a Ph.D., M.Sc., and B.Sc. in Environmental Engineering, along with post-doctoral trainings in Microbiology and Environmental Engineering. She specializes in Water-Energy-Food-Climate nexus and its impact on Public Health. Since 2002, she has addressed environmental and public health issues, utilizing engineering, microbiology, chemistry, -omic technologies, and AI/ML. Her areas of expertise include environmental surveillance; wastewater-based epidemiology; water treatment and reuse; bioremediation of contaminated sites; risk assessment; characterization-fate-transport of contaminants, including pathogens in various environments; anaerobic digestion; environmental microbiology; development of molecular tools and analytical methods. Throughout her academic career, Dr. Kaya has mentored and supported students, fostering safe and inclusive research environments to empower students in accomplishing their professional goals. Awarded for research and mentoring, including OSU’s 2022 Excellence Award in Undergraduate Research Mentoring, NIH’s AIM-AHEAD Research Fellowship Mentorship, the ASM Peggy Cotter Early Career Award, and NSF ACADEME fellowship. She is an active member of several professional organizations, including the Society of Women Engineers, the Association of Environmental Engineering and Science Professors, American Society for Microbiology, and the International Water Association.

# SDSU

## School of Public Health

# SDSU

## Imperial Valley

For more information about the SDSU Imperial Valley Public Health with emphasis in Environmental Health (PH-EH) program, please contact Dr. David Kanaan, Chair of the Division of Professional Studies:  
**[dkanaan@sdsu.edu](mailto:dkanaan@sdsu.edu)**

For application questions, please contact SDSU Imperial Valley Outreach and Recruitment Coordinator Francisco Peraza:  
**[fperaza@sdsu.edu](mailto:fperaza@sdsu.edu)**

For financial aid questions, please contact SDSU Imperial Valley Financial Aid Analyst Georgette Astorga:  
**[gastorga@sdsu.edu](mailto:gastorga@sdsu.edu)**

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