



# HEALTH + ENVIRONMENT = ENVIRONMENTAL HEALTH

Details inside...

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# ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCIENCES

BS in Public Health \* School of Public and Population Health



**EOHS** is the branch of public health that protects us from health threats in the natural, built, and work environments.



# IF YOU CARE ABOUT HEALTH AND OUR ENVIRONMENT



Asthma, cancers, heart disease, birth defects, infectious diseases, injuries, and numerous other health conditions may be caused or worsened by the quality of the environments in which we live, work, and play.



# THE EOHS EMPHASIS IS A GREAT CHOICE FOR YOU!



As the relationship between our health and the environments around us only grows, professions in EOHS have never been more important! Our GRADUATES may go on to work in research, outreach, education, advocacy, and other important roles in government agencies, community-based organizations, and other non-profits like these ...







## **INTERESTED?**



Contact Emphasis Coordinator, **Dr. Kimberly Rauscher**, at **kimberlyrauscher@boisestate.edu** or scan the QR code for more information about the EOHS emphasis and Public Health degree.



### ENVIRONMENTAL & OCCUPATIONAL HEALTH SCIENCES EMPHASIS BS in Public Health $\diamond$ School of Public and Population Health $\diamond$ College of Health Sciences

#### FOUNDATIONAL ENVIRONMENTAL HEALTH KNOWLEDGE



**EOHS 230 HEALTHY ENVIRONMENTS, HEALTHY PEOPLE** Introduces students to the field of environmental health, which is dedicated to protecting human health by preventing harmful exposures in the environment. Covers the major sources of environmental pollution and how contaminants in our air, water, soil and food causes disease and illness in the population. 3 CREDITS

**EOHS 231 HEALTHY WORK AND WORKPLACES** Introduces students to the ways our health is affected by our jobs. Covers the major chemical, biological, physical, and psychosocial hazards people experience every day on the job. Students will learn about the injuries and illnesses that can result from these exposures and consider how they can be eliminated. 3 CREDITS



#### APPLIED ENVIRONMENTAL HEALTH METHODS

**EOHS 331 MEASURING HUMAN EXPOSURES TO HEALTH HAZARDS** Presents the principles of exposure assessment, which is used to measure human exposures to hazardous substances in the environment and workplace. Students learn how to assess contaminant levels in our air, water, and soil, and their presence in the body. 3 CREDITS





#### EOHS 334 ENVIRONMENTAL HEALTH MANAGEMENT

Includes management strategies used by local environmental health agencies to protect water, dispose of waste, prevent disease outbreaks, ensure food safety, and help communities prepare for and respond to disasters. Incorporates field experiences where students see environmental health management principles in action. 3 CREDITS

#### CURRENT ENVIRONMENTAL HEALTH TOPICS



**EOHS 431 CLIMATE CHANGE AND PUBLIC HEALTH** This course considers the global environmental crisis of climate change from a public health perspective. Covers the natural and manmade causes of climate change and the direct and indirect impacts these changes have on human health. Public health strategies for addressing climate change and mitigating its health impacts are also discussed. 3 CREDITS

**EOHS 432 AGRICULTURE, THE ENVIRONMENT, AND PUBLIC HEALTH** Covers the effects of food production on the health of farmworkers, agricultural communities, and consumers. Students will learn the health effects of agricultural exposures and the complex relationships between farming methods, crop yield, and sustainability. Public health strategies for addressing these issues to protect farmers, their families, and communities are discussed. 1 CREDIT





**EOHS 433 ENVIRONMENTAL HEALTH DISPARITIES** Assesses how harmful environmental exposures that result in negative health effects are unevenly distributed due to social and economic inequalities. Prepares students to recognize the determinants of environmental health disparities and to develop strategies that address inequities and promote healthy environments for all. 3 CREDITS

**EOHS 434 EMERGING ISSUES IN WORKPLACE HEALTH AND SAFETY** Explores how work is changing in today's economy and what these changes mean for our health. Topics include increasing job insecurity and work stress, how global warming is exacerbating dangerous working conditions, and how technologies such as robotics and AI introduced new safety and health risks in our workplaces. Other contemporary workplace issues will also be addressed. 1 CREDIT



# **GAIN IN-DEMAND SKILLS**

### ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCIENCES EMPHASIS BS in Public Health $\diamond$ School of Public and Population Health

Our curriculum is designed so that graduates enter the workforce with both the knowledge *and* the SKILLS and COMPETENCIES that many of today's employers demand. See the sample of courses below and scan the QR code to learn more about the Public Health degree and EOHS emphasis.

### **PROFESSIONAL SKILLS**



**HLTH 419 PUBLIC HEALTH COMMUNICATION** Designed to familiarize students with the prominent theories, issues, and topics in the field of health communication. Covers a range of topics including important cultural differences in health, public awareness/prevention/intervention campaigns, and the role of media and relationships in health communication.

**HLTH 420 STRATEGIC PLANNING AND PROJECT MANAGEMENT** Covers strategic planning, which involves developing a blueprint for an organization to follow in order to achieve its goals. In addition, you will learn sought after project management skills which are needed to take a project from the idea stage to completion.

**HLTH 470 COLLABORATING FOR CHANGE** Social change and community work relies on productive cross-sector collaboration. This course presents students with key tools and theories that empower and engage communities to address their own issues.

**HLTH 446 GRANT WRITING** Nonprofits and government agencies use grant funding to support and expand their programs. Learn the essential components of a successful grant proposal and how to develop a compelling case for funding.

### DATA AND RESEARCH COMPETENCIES









**MATH 254 INTRODUCTION TO STATISTICS** Covers descriptive statistics, confidence intervals, hypothesis testing, simple linear regression, correlation, introduction to probability. Emphasis on reasoning, problem solving, communicating ideas, and applications to a wide variety of disciplines. Use of computer statistics packages and calculators to handle computations.

**HLTH 382 RESEARCH METHODS IN HEALTH** Through this course, you will learn how to design public health research Experiments, different methods for analyzing data, how to interpret and communicate study results, and the use of research to support evidence-based public health practice.

**HLTH 480 EPIDEMIOLOGY** This course covers the study of the distribution and determinants of health and disease within human populations. Public health epidemiologists study connections between our health and exposures in the environment, community, and at work.

**EOHS 479 RESEARCH EXPERIENCE** (*optional*) Provides students with an opportunity for supervised research in the field of Environmental and Occupational Health Sciences. Students develop and apply research skills under the mentorship and supervision of an EOHS research faculty member.

# PLACES WHERE EOHS GRADUATES MAY WORK



THE ENVIRONMENTAL HEALTH COALITION (EHC) works to reduce pollution and improve health and well-being for thousands of people in underserved, low-income communities. We believe that all people and communities have the right to live, work and play in a clean and safe environment regardless of their zip code. We believe that justice is accomplished by empowered communities acting together to make social change. We organize

and advocate to protect public health and the environment threatened by toxic pollution. EHC supports broad efforts that create a just society and fosters a healthy and sustainable quality of life. https://www.environmentalhealth.org/index.php/en/contact/job-opportunities-at-ehc

THE CHILDREN'S ENVIRONMENTAL HEALTH NETWORK (CEHN) is a national multi-disciplinary organization whose mission is to protect the developing child from environmental health hazards and promote a healthier environment. Today, CEHN is the voice of children's environmental health in the nation's capitol, one that is uniquely informed by a strong basis in pediatric and environmental health science. The network's goals are: to promote the development of sound public health and child-focused national policy; to stimulate preventionoriented research; to educate health professionals, policy makers and community members in preventive strategies; and to elevate public awareness of environmental hazards to children. https://cehn.org/join-us/careers-and-internships/





IDAHO BUREAU OF COMMUNITY AND ENVIRONMENTAL HEALTH within the Division of Public Health, works to improve the overall health and welfare of Idaho's communities. It provides information to Idahoans about environmental factors that impact health and how to maintain healthy environments at home, work, and school. It is committed to public health by conducting environmental assessments, protecting

children's environmental health, promoting asthma management and education, promoting healthy and safe water and air through education and awareness campaigns, advisories, well water testing, and indoor radon testing. https://healthandwelfare.idaho.gov/health-wellness/environmental-health

THE NATIONAL COUNCIL FOR OCCUPATIONAL SAFETY AND HEALTH is a national leader in the fight for safe, healthy working conditions. The National COSH works to ensure that all workers can earn their living with dignity and respect and return home alive and well at the end of their shift. National COSH engages and impacts workers in communities across the country through a network of 23 state and local non-profit [sister] COSH groups. Regional COSH groups unite workers with labor, community, legal and health allies to win decent, just working conditions and build a powerful movement encompassing racial, economic and environmental justice. https://www.coshnetwork.org/Campaigns





THE BLUEGREEN ALLIANCE unites fourteen of America's largest and BLUEGREEN most influential labor unions and environmental organizations to identify ways that today's environmental challenges can create and maintain quality jobs and build a stronger, fairer economy. The organization's efforts center on

commonsense solutions to environmental challenges in a way that supports quality, family-sustaining jobs across the economy. Our staff design public policies, perform research, and run public education and advocacy campaigns, facilitate dialogue between environmentalists, workers/union members and other key stakeholders. https://www.bluegreenalliance.org/about/careers/

**IDAHO SMART GROWTH** is a progressive, comprehensive resource center working towards a more sustainable pattern of growth, connecting people to places. We collaborate with groups involved in smart growth decisions; owners and developers; government entities; and neighbors and citizens to help build communities that are healthy, safe and resilient. As our state continues to grow, the urgency of smart growth and the desire to preserve and enhance our



quality of life becomes more apparent. Idaho Smart Growth offers a range of programs to help make our communities more attractive, economically stronger and safer for everyone. <u>https://www.idahosmartgrowth.org/about/</u>

# PLACES WHERE EOHS GRADUATES MAY WORK



The US ENVIRONMENTAL PROTECTION AGENCY (EPA) has a mission to protect human health and the environment. We work to ensure that: Americans have clean air, land and water; federal laws protecting health and the environment are administered and enforced, and all parts of society-communities, individuals, businesses, and governments--have access to accurate information to effectively manage human health and environmental risks; contaminated lands and toxic sites are cleaned

up and revitalized; and chemicals in the marketplace are reviewed for safety. The EPA has office all over the US. https://www.epa.gov/careers.

### THE NORTHWEST CENTER FOR ALTERNATIVES TO PESTICIDES

works to protect community and environmental health and inspire the use of ecologically sound solutions to reduce the use of pesticides. Some of the Center's values include: dismantling injustices in our environment and working to overcome them by considering

who stands to lose and who benefits in environmental decisions and actions; lasting change is possible when those who are directly impacted have the platform to speak their own truth and organize their power; and the strength of our impact is closely tied to the strength of our diverse partnerships. https://www.pesticide.org/

At COMING CLEAN, we take a unique, consensus-based, and collaborative Coming clean At Coming CLEAN, we take a unique, consensus-based, and collaborative approach—uniting organizations, experts and activists across the environmental health and justice movements-to cultivate grassroots power and impact decision-

making from inside the beltway to boardrooms across America. We find synergies which allow everyone's unique strengths to shine, and focus these strengths on a common effort: environmental health and justice that leaves no community behind. Initiatives include: Clean Energy and Climate Solutions; Farmworker Health and Justice Team; Safe Markets and Safe Substitutes and building community power. https://comingcleaninc.org/

### WORLD HEALTH ORGANIZATION. DEPARTMENT OF ENVIRONMENT,

CLIMATE CHANGE, AND HEALTH strives to promote a healthier environment, intensify primary prevention and influence public policies. By focusing on reducing environmental and social risk factors, nearly a quarter of the global burden of disease can be prevented. Examples are promoting safe water, better hygiene measures, and safer management



of toxic substances in the home and workplace. Through cooperation with sectors such as energy, transport and agriculture, root environmental and social causes of ill-health can be addressed that lie beyond the direct control of the health sector. https://www.who.int/teams/environment-climate-change-and-health

> **IDAHO CENTER FOR SUSTAINABLE AGRICULTURE** is a 501(c)3 organization connecting regional agricultural producers with the knowledge to address economic viability and resilience in a changing environment. The purpose has been to promote local and sustainable food communities through research, collaboration with farmers, and the expansion of local food distribution. https://www.idahocsa.org/

### THE ASSOCIATION OF FARMWORKER OPPORTUNITY PROGRAMS

(AFOP) has been an advocate for migrant and seasonal farmworkers in the United States since 1971. We provide job training, pesticide safety education, emergency assistance, and an advocacy voice for the people who prepare and harvest our food. AFOP also advocates for policies that benefit and protect agricultural workers. Each year, AFOP provides a variety of federally approved trainings on pesticide safety and heat-related illness to over 30,000 farmworkers, resulting in reduced injuries and illnesses as well as helping growers comply with the law. https://afop.org/





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> THE AMERICAN FEDERATION OF LABOR AND CONGRESS OF **INDUSTRIAL ORGANIZATIONS (AFL-CIO)** works tirelessly to improve the lives of working people. We strive to ensure all working people are treated fairly, with decent paychecks and benefits, safe jobs, dignity, and equal opportunities. Our work is

anchored in making sure everyone who works for a living has family-supporting wages and benefits and the ability to retire with dignity. We help make safe, equitable workplaces and give working people a collective voice to address workplace injustices without the fear of retaliation. We fight for social and economic justice and strive to vanquish oppression in all its forms. https://aflcio.org/about-us/careers-and-apprenticeships



### **PLAN OF STUDY & COURSE SEQUENCE** BSPH. ENVIRONMENTAL & OCCUPATIONAL HEALTH SCIENCES *EMPHASIS*

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FALL	SPRING			
Course # and Name	Credits	Course # and Name		
100 Foundations of Intellectual Life	3	Foundations of Humanities		
ENGL 101 Writing and Rhetoric I	3	ENGL102 Writing and Rhetoric II	3	
HLTH 110 Intro to Health Science & Public Health	3	HLTH 105 Health, Wellness, and Advocacy	3	
Foundations of Arts	3	Foundations of Sciences	3	
Foundations of Oral Communication	3	POLS 101 American National Government		
Total	15	Tot	al 15	
	Y	EAR 2		
FALL	FALL SPRING			
Course # and Name	Credits	Course # and Name	Credits	
BIOL 227 Human Anatomy I w/lab	4	BIOL 228 Human Anatomy II w/lab		
EOHS 230 Healthy Environments, Healthy People	3	EOHS 231 Healthy Work and Workplaces		
ILTH 210 Health Services Administration		HEP 240 Foundations of Health Educ and Promotion		
MATH 254 Introduction to Statistics	3	Elective credits		
200 Foundations of Ethics and Diversity	3			
Total	16	Tot	al 16	
	Y	EAR 3		
FALL		SPRING		
Course # and Name	Credits	Course # and Name	Credits	
HLTH 315 Health Policy and Ethics	3	HLTH 310 Evidence-based Public Health		
EOHS 331 Measuring Human Exposures to HIth Hazards		EOHS 334 Environmental Health Management		
HLTH 382 Research Methods in Health		HLTH 419 Public Health Communications		
Elective credits		HLTH 470 Collaborating for Change		
		Elective credits	3	
Total		Tota		
	YE	EAR 4		
FALL		SPRING		
Course # Name	Credits	Course # Name	Credits	
HLTH 420 Strategic Planning & Project Management	3	IEP 446 Grant Writing		
OHS 431 Climate Change and Public Health		EOHS 433 Environmental Health Disparities		
EOHS 432 Agriculture, the Env, and Public Health <sup>a</sup>	2 Agriculture, the Env, and Public Health <sup>a</sup> 1 EOHS 434 New Issues in Workplace Health & Safety <sup>a</sup>		1	
HLTH 480 Epidemiology		[FF] HLTH 400 Interprofessional Capstone		
Elective credits (1 cr optional Research Rotation)	4	Elective credits	6	
Total 14		Tot	al 14	