

# Master of Science in Epidemiology Program 2024-2025

Student Handbook



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## Purpose of Handbook

Congratulations on being accepted into the Masters of Science degree program in Epidemiology. Epidemiology is still a relatively young science which offers a myriad of work opportunities in government, academia, and industry where you can contribute to applied science and public health. We look forward to working with you and supporting your educational journey in epidemiology.

The proposed MS program in epidemiology in the College of Public Health is intended to prepare professionals for mid-level careers in conducting population-based research and clinical trials. The MS in epidemiology is a unique program that strongly emphasizes the acquisition of applied skills in the complementary fields of epidemiology and biostatistics, as well as the theoretical foundations of these disciplines. Graduates of this program will be prepared to work as epidemiologists in academia, government, and industry.

In contrast to other master's programs in epidemiology, this program will leverage the unique collaborative environment between the departments of Biostatistics and Epidemiology and Environmental Health in the College of Public Health. This is an integrative two-year master's program with a strong emphasis on quantitative and methodological skills development, which lays the foundation for coursework requirements for the PhD programs or other doctoral programs. The strong cross-training and emphasis on mentorship in the program is intended to develop researchers who will be skilled in designing, conducting, analyzing, and interpreting the results from an increasing variety of study designs and databases in the public health and clinical research domains.

This handbook is a supplement to any University or college level information that you have received. The purpose of this handbook is to provide you with the curriculum, program policies, and other information specific to the MS Epidemiology program.

#### It is important that you read this handbook and refer to it during your course of study!

When we update policies, procedures, and guidelines, we will notify you via email and publish the updates on the MS Epi Program Canvas Homepage and College website.

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# Welcome from the College of Public Health Message from the Dean

#### Dear MS Epidemiology Students,

In the College of Public Health, we train health champions. Champion has different meanings. It can mean someone who is a victor, the winner. It can also mean someone who fights for a cause or works on behalf of others. So, what does a health champion mean here? In the College of Public Health, we train people who fight, work, strive, struggle, persist for the health of others. For us, it is more than just being health-focused or treating people who are sick. At the University of Kentucky, our health champions fight for prevention – our work is needed to keep communities safe from harm, from disease, from injury.

Health champions solve problems. Public health problems are complex. Our problems involve human perception, stigma, behaviors. They include a person's history, what has happened to them in their lives. Public health problems need biology, chemistry, and computing. It matters where a person lives, where they grew up, who influences them and how they first learned about health. The path to discovery in public health is not fast or simple. You may be surprised to hear stories from faculty and staff about times when they failed. Failure is expected. What defines a health champion is how you come back when you experience defeat.

As a member of our student body, there are many people here to support you. I encourage you to reach out early and often to the faculty, to staff, and to other students. Our staff in Student Engagement & Academic Success (SEAS) care about your academic progress, your well-being, your success and development as a student. Department chairs and program directors are available to you to talk about experiences in the program and classes. Your faculty are training you to be the next generation of public health scientists and to champion for the health of others – they want to talk to you, teach you, learn with you. Take every opportunity to connect with the faculty, staff, and students of the College. Success in public health never occurs in isolation – this is a field where you cannot do it alone. Public health is team science. Our approach to solving problems is made better because we work together. Part of your education here will be the realization that working with others is the path to impact.

While a learner in our college, you will encounter people from many different backgrounds, disciplines, and perspectives. Our college is comprised of four academic departments: Biostatistics, Epidemiology and Environmental Health, Health Behavior and Society, and Health Management and Policy. Within these four departments, the core areas of public health are represented. Many of us (myself included) come to public health from a variety of pathways – our training is often as diverse as our people. However, each one of us belongs here. We belong here because of a shared commitment to make a difference. We belong here because we believe that the health of others deserves a champion. We belong here because we know that prevention is possible. You belong here, too.

On behalf of the faculty and staff of the College, it is my pleasure to welcome you to the College and congratulate you on the important decision to pursue advanced training within public health.

Sincerely, Heather M Bush, PhD, Dean for the College of Public Health



# College of Public Health Vision and Mission

#### **Vision Statement**

To be a catalyst of change for population health

#### **Mission Statement**

To develop health champions, conduct multidisciplinary and applied research, and collaborate with partners to improve health in Kentucky and beyond.

# Welcome from the Department of Epidemiology and Environmental Health

Dear MS Epidemiology Students,

Welcome to the University of Kentucky, College of Public Health's Master's of Science program in Epidemiology! We are so pleased that you have chosen such a meaningful field of study and our program to take this important step in your education.

Our College is dedicated to high quality teaching and research, and we are deeply committed to advancing public health by training the next generation of epidemiologists. Our goal is to provide you with rigorous training in a professional and supportive environment. In-depth learning experiences will provide you with the top-tier training necessary to address the public health challenges facing our world.

While in our program, we encourage you to take advantage of all learning opportunities, including participation in various lecture series, workshops, and seminars offered across campus. UK is a dynamic and vibrate home for research! Ultimately, you will demonstrate expertise in a specific content area for your thesis research, but these experiences will enhance your breadth of understanding of public health and the value of epidemiology in solving issues related to chronic disease, environmental risks, aging, substance use, health disparities, and many other public health issues.

As Chair, I recognize the important role this new Master's program plays in our collective efforts to educate the next generation of epidemiologists. We encourage you to reach out with suggestions and feedback. Please also let us know what facets of the program work well. We look forward to partnering with you in this phase of your education and career.

We wish you all the best and much success at UK and beyond! Sincerely,

Erin Haynes, DrPH Chair of Epidemiology and Environmental Health



#### Teaching Philosophy for the MS in Epidemiology Program

Our teaching philosophy is grounded in the belief that a strong foundation in epidemiology is crucial for addressing public health challenges. This approach to teaching is shaped by three core principles: fostering a deep understanding of epidemiological concepts, encouraging critical thinking and problem-solving, and promoting collaborative learning.

The field of epidemiology is dynamic with continuous growth in incorporating new methods and borrowing methods from other disciplines. Theoretical concepts in the field are always in a state of flux as traditional concepts of bias, confounding, and statistical inference are refined and expanded. Our goal is to create a learning environment that is both rigorous and supportive, where students can build a solid foundation of knowledge. Our courses include a blend of lectures, case studies, and hands-on activities that allow students to apply theoretical concepts to real-world scenarios. We strive to incorporate current research and public health issues into the curriculum, ensuring that the learning is tied to practical applications, thereby solidifying understanding and retention of key concepts.

In addition to theoretical knowledge, it is crucial for students to gain practical skills in applied epidemiology. We endeavor to provide students with the opportunity to study and practice data collection, outbreak investigation, and epidemiological surveillance in real-world settings. Applied epidemiology is emphasized through assignments that require students to analyze real data sets, interpret findings, and develop actionable recommendations.

Epidemiologists must be adept at analyzing data, identifying patterns, and developing evidence-based solutions to public health problems. To cultivate these skills, the faculty emphasize the importance of critical thinking and problem-solving and encourage students to question assumptions, evaluate evidence critically, and consider multiple perspectives. Through assignments that require data analysis, interpretation of results, and development of research proposals, students learn to approach problems systematically and creatively. Our classes incorporate discussions and debates on contemporary public health issues to stimulate critical thinking and expose students to diverse viewpoints.

Collaboration is essential in the field of epidemiology, where professionals often work in multidisciplinary teams to address complex health issues. Fostering collaborative learning environment by incorporating group projects, peer reviews, and interactive class activities are approaches that are used in our curriculum. These collaborative experiences not only enhance learning but also help students develop essential teamwork and communication skills.

Many students in the MS in Epidemiology program aspire to pursue doctoral studies. To support these ambitions, our curriculum includes rigorous research training, including advanced statistical methods, research design, and scientific writing. Students are encouraged to develop their own research proposals as part of their thesis and undertake independent research projects. By fostering a research-oriented mindset and providing opportunities for scholarly activities, we hope to prepare students for the challenges of PhD programs and to encourage them to contribute to the field of epidemiology through innovative research.

Importantly, we are committed to creating an inclusive and diverse learning environment which recognizes the value of diverse perspectives in enriching the learning experience and advancing the field of epidemiology. We strive to ensure that all students feel valued and supported, regardless of their background or experiences. Fostering an inclusive classroom culture while providing individualized support to meet the unique needs of each student is among the topmost concerns of our educational program.

#### Expectation for the Director of Graduate Studies (DGS)

The DGS is the representative of the Graduate School and is responsible for facilitating the admissions process, monitoring the program course offerings, approving electives, approving requests for exams and overseeing student progress. As the chief representative of the students in the department, the DGS also consults with the Department Chair about course schedules, serves as a resource for information about funding, and works with department administrative staff for communications to students.

Administrative staff in the department include:

Department of Epidemiology and Environmental Health

- Kelley Salyers (Department Operations Manager)
- Deana Bowling (Administrative Assistant)

The departmental manager and administrative assistants in each department are available to help students navigate within the department and program. The Department Operations Managers are involved with supporting assistantship assignments and payments. These administrative staff work with the department chairs and DGS to help students navigate program questions and issues involving college or university processes. Most processes now occur electronically; students should pay careful attention to the University's Academic Calendar to meet deadlines for submission of key forms.

#### **Expectation for Program Faculty**

The Graduate School categorizes faculty by graduate programs. Not all faculty at the University of Kentucky are defined as graduate program faculty. Faculty in the Department of Epidemiology and Environmental Health are assigned as program faculty. Within the Graduate School, this program is designated as MSEPI.

Program faculty will attend regularly scheduled MSEPI program faculty meetings and will participate in program assessment and planning. The program faculty who teach in the MSEPI program are available to students for mentoring and professional development. You are encouraged to consult with the DGS in helping to find the program faculty who can best support your studies and research.

#### **Program Faculty**

#### Erin Abner

Dr. Erin Abner is a Professor in the Department of Epidemiology with joint appointments in the UK Sanders-Brown Center on Aging and the Department of Biostatistics. Dr. Abner joined the College as an assistant professor in 2013. She is the author or co-author of more than 100 peer-reviewed publications. Dr. Abner is currently an MPI or co-investigator on multiple NIH-funded grants, including the NIH/NIA Alzheimer's Disease Center at the UK Sanders-Brown Center on Aging, where she is the Co-Leader of the Data Management and Statistics Core. Her current research is focused on assessing how medical conditions like hypertension and diabetes are related to cognitive impairment and neuropathology. Dr. Abner teaches primarily graduate-level methods courses for the Department of Epidemiology, including Advanced Research Methods in Biostatistics and Epidemiology and Introduction to Causal Inference.

#### Steve Browning

Dr. Browning is an Associate Professor of Epidemiology in the College of Public Health and serves as the Deputy Director of the NIOSH-funded Central Appalachian Regional Education and Research Center (CARERC) and directs the Occupational Epidemiology Core. He brings more than 30 years of experience in conducting public health surveillance, cohort studies, and the analysis of large secondary datasets. His research interests are in occupational, injury, and environmental epidemiology. He served as the Director of Graduate Studies (DGS) for the PhD program in Epidemiology and Biostatistics from 2013-2018 and currently serve as the DGS for the newly created MS in Epidemiology. His expertise is in the design and analysis of occupational health studies and he currently teaches courses in Study Design (CPH 714), Occupational and Environmental Epidemiology (CPH 617) and Introduction to Epidemiology (CPH 605) in the master's programs (MS and MPH).

#### W. Jay Christian

Dr. W. Jay Christian, PhD, MPH (Associate Professor) is a spatial and environmental epidemiologist with extensive experience in the analysis of cancer, respiratory disease, and other health outcomes, especially in Kentucky and the Central Appalachian region. He earned a BA (1998) in Anthropology and Russian Studies from Washington University in St. Louis, and an MPH (2003) with a concentration in Epidemiology from the University of Kentucky. In 2013 he completed a PhD in Geography from the University of Kentucky with a focus on health geography. Dr. Christian contributes expertise in geographic information systems (GIS), spatial statistics, and data visualization to a wide variety of federally funded research projects, and teaches many of these methods in his course, CPH 660: Disease Mapping & Data Visualization. He also assists the state of Kentucky with regular analysis of unusual patterns of cancer and consults on other epidemiological issues related to cancer and the environment. He is currently developing a new research program examining use of cannabis (i.e., marijuana) among Kentuckians, especially cancer patients and survivors. Dr. Christian leads the college's cycling club, which rides once per week throughout the fall and spring semesters.

#### Erin Haynes

Dr. Haynes is the Kurt W. Deuschle Professor of Preventive Medicine and Environmental Health and Chair of the Department of Epidemiology and Environmental Health. She is director of the UK Center for the Environment and director of the UK Center for Appalachian Research in Environmental Sciences (CARES). She received a Master of Science in Toxicology from the University of Cincinnati and a Doctorate in Public Health in Environmental Health Science from the University of Michigan School of Public Health. She also completed a postdoctoral fellowship at the University of Cincinnati's Molecular Epidemiology in Children's Environmental Health NIEHS-funded training program. She is a community-engaged environmental health scientist who has forged multidisciplinary research teams to investigate community-identified exposure issues, primarily in Appalachian underserved communities. Her research expertise is pediatric manganese exposure, but is also working to address community concerns about potential exposures related to other industrial processes and disasters.

#### Krystal Kuhls

Dr. Krystle A. Lang Kuhs, PhD, MPH is an Associate Professor in the Department of Epidemiology and Environmental Health. Dr. Kuhs received her PhD in biomedical sciences from the University of Pennsylvania in 2011 and a Master of Public Health in 2012 from Johns Hopkins University where she

concentrated in Epidemiology and Biostatistics. Dr. Kuhs is a molecular epidemiologist, whose research focuses on developing novel molecular predictors of head and neck cancer risk, response to treatment and risk of recurrence, with a particular focus on head and neck cancers caused by infections such as human papillomavirus (HPV). Dr. Kuhs co-developed CPH 738 Special Topics Biostatistics: Fundamentals of Grant Writing for Epidemiology and Biostatistics and currently teaches CPH 615 Cancer Epidemiology.

#### Mary Beth Lacey

Dr. Lacey is an Assistant Professor of Epidemiology and Environmental Health in the College of Public Health at the University of Kentucky. She has a PhD in Epidemiology from Brown University (2017) and an MPH from the University of Georgia (2011). Her research focuses on diabetes epidemiology and outcomes. She is particularly interested in using health information technology and quality improvement to improve clinical decision-making and, ultimately, health outcomes. She teaches the intermediate epidemiologic methods course, CPH 712 (Intermediate Epidemiology), which is a core course in the program.

#### Ketrell McWhorter

Dr. Ketrell McWhorter is an Assistant Professor at the University of Kentucky's Department of Epidemiology and Environmental Health. She specializes in social and environmental exposures and their impact on cardiometabolic health. Dr. McWhorter earned her PhD in Molecular Epidemiology for Children's Environmental Health as an NIEHS-T32 fellow from the University of Cincinnati College of Medicine in 2017. She then completed a postdoctoral fellowship at the National Institute of Environmental Health Sciences (NIEHS) in the Social and Environmental Determinants of Health Equity Group. Currently, her research focuses on modifiable environmental exposures, including secondhand and direct tobacco smoke, sleep behaviors, and air pollution, and their effects on cardiometabolic health outcomes like type 2 diabetes, cardiovascular disease, and mortality. She teaches CPH776 – Introduction to Global Health (3 graduate credits) and co-teaches ENT/BIO/CPH561 – Insects Affecting Animal and Human Health, which can be taken as electives in the MS Epidemiology program.

#### Rachel Vickers-Smith

Dr. Rachel Vickers-Smith is an Assistant Professor in the Department of Epidemiology and Environmental Health at the University of Kentucky College of Public Health (UKCPH). She joined the faculty in August 2020. Prior to that she was an Assistant Professor at the University of Louisville School of Nursing where she taught graduate-level epidemiology and biostatistics courses. Dr. Vickers-Smith's research focuses on identifying and preventing adverse outcomes and harms related to changing patterns in the drug use landscape. In the MS program, she teaches EPI 715: Research Methods in Epidemiology and Biostatistics.

#### Kathleen Winter

Dr. Kathleen Winter is an Assistant Professor in the UK College of Public Health's Department of Epidemiology and Environmental Health. She received her PhD in epidemiology from the University of California, Berkeley, and her MPH in epidemiology from The Ohio State University. Dr. Winter currently serves as the State Epidemiologist for Kentucky and voting representative on the Council for State and Territorial Epidemiologists. She also serves as the Director of the Division of Epidemiology and Health Planning with the Kentucky Department for Public Health (KDPH) and is responsible for the oversight of approximately 300 staff and more than \$500 million in federal grants. Dr. Winter oversees the Commonwealth of Kentucky's Office of Vital Statistics, state immunization programs, and all state public health infectious and communicable disease programs. Her research interests include vaccine

effectiveness and evaluation of surveillance systems and communicable disease control measures. She has nearly 20 years of experience in infectious disease epidemiology, including at state and local health departments in California, Ohio, and Kentucky and at the University of Kentucky. Dr. Winter primarily teaches graduate-level courses for the Department of Epidemiology and Environmental Health, including Infectious Disease Epidemiology (CPH 612).

#### **April Young**

Dr. April Young is a Professor in the Department of Epidemiology and Environmental Health and Faculty Associate with the Center on Drug and Alcohol Research. Dr. Young has a Bachelor of Arts in Biology, MPH with a concentration in Health Behavior, and PhD in Behavioral Science. With colleagues and students, Dr. Young has been conducting substance use research in rural Kentucky for more than ten years. She has led six federally-funded studies, including a project on innovative methods for recruiting people who use drugs, a private-public partnership to develop software for identifying infectious disease transmission networks, a multi-state to improve clinical trial design in rural settings, and a cooperative agreement under the National Rural Opioid Initiative to examine harms associated with substance use in twelve Kentucky counties. In addition to working with rural Appalachian communities to improve their capacity to prevent overdose, HIV, and hepatitis C, she has also conducted research on HIV, sexual risk behavior, and vaccine acceptance in a variety of other settings. Dr. Young's desire to teach and mentor students was the most influential factor in her decision to pursue an academic career, and she welcomes opportunities to engage students in her research and mentor students in their independent endeavors. Dr. Young has taught graduate-level Infectious Disease Epidemiology and Global Health, as well as the MPH Capstone Course. She has also taught undergraduate courses on social epidemiology and substance use, and directed undergraduate independent studies on substance use research.

# **Program Information**

#### **Program Overview**

The Master of Science in Epidemiology (MSEPI) program trains students in the conceptual foundations and the methodological skills that are foundational in epidemiology. The program is designed to meet the needs of candidates who seek careers in government, academia, and industry - which all require advanced knowledge in conducting research and analyzing health data. The MSEPI degree is also appropriate academic preparation for students who plan to continue their education for a PhD degree in epidemiology or a related discipline. Students will benefit from experiential learning opportunities and formal training in epidemiology, applied biostatistics, and data analysis programming as preparation for the scientific skills needed for undertaking applied research.

#### Program Website

The College of Public Health website for the MS program is located at

https://cph.uky.edu/programs/master-science-epidemiology.

For current students in the program, the Canvas shell located at

https://uk.instructure.com/courses/1931890/pages/ms-epidemiology-program-page

is a current resource for program specific information, student resources, the calendar of deadlines and applicable forms.

#### **Program Objectives**

Following successful completion of the program, it is expected that students will be able to:

- Demonstrate the ability to critically evaluate the literature in a substantive area of research in epidemiology; be able to identify gaps in knowledge in the substantive area.
- Using principles of epidemiologic study design, interpret the impact of bias, confounding, and effect modification on causal inference in epidemiologic research.
- Analyze epidemiologic data using advanced statistical methods including linear models, generalized linear models, and survival analysis with statistical software.
- Apply core aspects of field methods in epidemiology (e.g., survey design, sampling and power,
   GIS, exposure assessment, and surveillance) to epidemiologic research.
- Communicate both orally and in writing the results of epidemiologic analyses in a professional manner.

#### Admissions:

Bachelor's degree (BS/BA) in science, math/statistics, health or a related field. Prior course work in calculus (at least one semester) and a strong introductory biostatistics course is preferred.

Prior experience in programming in a statistical language like SAS, R or other is recommended but not required.

- Grade Point Average. Per the Graduate School at the University of Kentucky, the minimum acceptable graduate GPA is 3.00. However, we anticipate that the majority of successful applicants will have GPAs between 3.25 and 4.00.
- GRE scores. GRE scores will no longer be required but can be submitted as part of the application.
- TOEFL scores (for those who are not native English speakers) -- Per the Graduate School, the minimum acceptable TOEFL score is 550 (paper-based), 213 (computer-based), or 79 (internet-based).
- Three letters of recommendation -- At least one letter should explicitly address the applicant's quantitative skills. All three letters should be dated.
- Statement of purpose -- Describe career and dissertation research interests, along with qualifications for study in this program.

#### Transfer credits.

Per the Graduate School, the maximum that can be transferred is 18 credit hours from a previously awarded master's degree and 9 credit hours otherwise

#### **Program Requirements**

Students will complete a minimum of 39 credit hours of coursework), including 27 hours of required program inclusive of a research thesis (CPH 699), and a minimum of 12 hours of electives. CPH 663 (Introduction to Public Health 1- credit) or equivalent is needed for students without a prior public health degree.

The core curriculum includes foundational coursework in epidemiology, biostatistics, and programming:

- CPH 605 Epidemiology (3)
- CPH 712 Advanced Epidemiology (3 hours)
- BST 600 Intro to Biostatistical Methods (3 hours)
- BST 635 Databases and SAS programming (3 hours)
- BST 681 Linear Regression (3 hours)
- EPI 714 Epidemiologic Study Design (3 hours)
- BST 715 Advanced Methods in Epidemiology and Biostatistics (3 hours)
- Choose one: CPH 612, CPH 615 or CPH 711 (Chronic, Infectious, or Cancer Epidemiology)
- CPH 699 MS Epidemiology Research Thesis (3 hours)

CPH 663 Introduction to Public Health (required only for students without prior PH degree). (1 credit)

Electives in epidemiology and biostatistics should be selected from the following list:

- CPH 612 Infectious Disease Epidemiology (3 hours)
- CPH 615 Cancer Epidemiology (3 hours)
- CPH 711 Chronic Disease Epidemiology (3 hours)
- CPH 617 Environmental / Occupational Epidemiology (3 hours)
- CPH 660 Disease Mapping and Data Visualization (3 hours)
- CPH 713 Pharmacoepidemiology (3 hours)
- BST 636 Analytic Methods for Mining Healthcare Data
- BST 661 Survival Analysis (3 hours)
- BST 663 Analysis of Categorical Data (3 hours)
- BST 664 Design and Analysis of Clinical Trials (3 hours)

Any other electives must be approved by the DGS.

#### Sample Schedule

#### Sample Schedule (2 Years):

Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring
CPH 605	CPH 612, CPH 615, CPH711	CPH 712	EPI 714
BST 600	BST 635	BST 681	EPI 715
CPH 663 ( if needed)[1 credit]	Guided Elective	Guided Elective	CPH 699 Thesis
Guided Elective		Guided Elective	
Total = 9-10 credits	9 credits	12 credits	9 credits

#### Thesis Requirement

The thesis research will need to be an original scientific project using either primary or secondary data with a population (epidemiologic) or clinical trials focus. The thesis must be developed under the direction of a Full or an Associate member of the Graduate Faculty. The completion of the thesis will require the formation of a master's thesis committee. No fewer than 3 persons shall constitute the thesis committee. One of the members must be a Full member of the Graduate School, and at least 2 of the 3 members must be faculty from the Department of Epidemiology and Environmental Health in the College of Public Health. The scope of the thesis shall demonstrate independence, mastery of research skills, and thoughtful reflection of the results in accordance with guidelines given in the CPH student handbook and the rules of the graduate school. A successful thesis must be approved by the thesis

director, the Director of Graduate Studies, the Examination Committee, and the Graduate School, and must conform with instructions prepared by the Graduate School entitled "Instructions for the Preparation of Theses and Dissertations." (Copies of this document are available from the Graduate School.)

At the University of Kentucky, Master's degrees (Plan A) require the completion of a thesis. This work reflects the quality of the program that supervises the student and the university that awards the degree. Therefore, the Graduate School sets criteria and standards for the format of the written work which will be available not only to the immediate campus, but also to a wider scholarly community via the Web. Each program has selected the style manual(s) most consistent with scholarly practice in their specific discipline. The student should consult with the Director of Graduate Studies concerning the manual to be used.

Students no longer have had the option of submitting their thesis or dissertation in the traditional print format. The submission of the work in an electronic form has a number of potential advantages, including greater flexibility for the inclusion of multimedia components, and cost savings on paper.

Each student must meet with a faculty advisory committee before the end of the semester for which the student is admitted to discuss the thesis research project (Plan A). The intention is that this committee would be the student's examination committee, thereby involving the examination committee in the development of each student's thesis. The committee composition must meet all requirements of the Graduate School for composition of a final examination committee for an MS degree. Any changes in the schedule of classes made by the committee will be submitted to the Director of Graduate Studies for audit to ensure that all requirements will be met. The student must document the first and all subsequent advisory committee meetings by submitting an Advisory Committee Meeting Report to the Director of Graduate Studies. These reports will be placed in the student's academic file. Plan A students must present an acceptable thesis and successfully complete an oral final examination.

Maximum length of time for completion of the Master's degree and procedures for early termination of a student's enrollment in the program will comply with guidelines outlined in the Graduate School Bulletin.

#### Final Examination (Thesis Defense)

Once a student has completed the thesis research and has obtained permission from the dissertation advisor and DGS to do so, the student and DGS will notify the Graduate School that a final examination with the committee is desired. The Graduate School must be notified at least four weeks in advance. The student will work with their committee to identify an appropriate time and date for the final examination, which must be approved by the Graduate School at least two weeks in advance. The final examination will be publicized by the College and open to any member of the University community. The final examination will require the student to furnish the thesis committee with a written document (minimum 3 weeks in advance) as well as to prepare slides for an oral presentation describing the research (scientific presentation of approximately 45 minutes). The presentation may include a general audience with questions asked from the audience. However, the examination portion, with questions from committee members, will be conducted in a closed session. During the examination period, the advisory committee may ask the student questions about the content of the written document, the oral presentation, implications of the

student's work for science and public health, and opportunities for future research. The possible outcomes are Pass and Fail. A student whose outcome is Pass will need to submit a final version of the written dissertation document to the Graduate School (maximum 60 days after the Pass outcome), considering any corrections or suggested changes furnished by the committee on or before the date of the Final Examination. With permission from the dissertation advisor and DGS, a student whose outcome is Fail may have a second final examination, after remediating deficiencies identified in the first final examination and in a manner consistent with the regulations and policies of the Graduate School. In particular, the second final examination must take place between four and twelve months after the first final examination. A third final examination is not permitted.

#### Research Training

The University of Kentucky promotes and maintains a culture of responsible and ethical conduct in research. Since July 2020, the University of Kentucky's Vice President for Research mandated RCR training for all faculty, staff, and students that participate in research or creative work. This systematic instruction on the topic of research ethics ensures a baseline knowledge of ethical research practices. Participants who successfully complete training provided by the University's Office of Research Integrity (ORI) become certified for a period of two years (renewable thereafter).

Master's degree students are required to complete the online CITI Course on RCR and an In-Person RCR training. The CITI Course consists of 11 modules covering: authorship, collaborative research, conflicts of interest, data management, financial responsibility, mentoring, peer review, plagiarism, research involving human subjects, research misconduct, and using animals in research. Review of the required materials and completion of the quizzes requires 30-35 minutes per topic. Courses do not have to be completed in one session; it takes roughly 5 hours to complete the entire course. A minimum aggregate score of 80% is required to pass the RCR course. Supplemental modules are also available and include research, ethics and society. The target audience for this RCR course is graduate students who are obtaining their first instruction in these concepts. The In-Person RCR training is a one-hour case study discussion and lecture. Students who conduct research with animal or human subjects must obtain additional training in these areas prior to commencing a research project. For MS epidemiology students, the RCR online training is offered in the MS thesis course (CPH 699).

#### CPH 663 Competencies.

For students without a prior public health degree, they are required to complete the online CPH 663 course on the twelve different areas of public health foundational knowledge. These foundations were developed by the Council on Education for Public Health (CEPH), an independent agency recognized by the U.S. Department of Education to accredit schools of public health, and public health programs outside schools of public health.

These foundations include:

Profession & Science of Public Health

- 1. Explain public health history, philosophy, and values
- 2. Identify the core functions of public health and the 10 Essential Services
- 3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
- 4. List major causes and trends of morbidity and mortality in the U.S. or other community relevant to the school or program
- 5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.
- 6. Explain the critical importance of evidence in advancing public health knowledge

Factors Related to Human Health

- 7. Explain the effects of environmental factors on a population's health
- 8. Explain biological and genetic factors that affect a population's health
- 9. Explain behavioral and psychological factors that affect a population's health
- 10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities
- 11. Explain how globalization affects global burdens of disease
- 12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)

This course should be completed during the first semester enrolled in the MS degree program. It is an online course in Canvas. Please see the DGS or Academic Advisor for further details.

#### Funding Opportunities.

The College of Public Health offers a limited amount of scholarship funding for master's degree students. This funding varies based upon donor funds with an average award amount of \$500-\$1,000 per year. Typically, the applications for scholarships will open in the Spring semester. Approximately 50% of our second-year master's students have a form of CPH assistantship (Teaching Assistant, Research Assistant, Graduate Assistant, or Instructional Aid) or employment. Students can also consult the Graduate School website for funding and scholarship information https://gradschool.uky.edu/student-funding)

#### Continuous Enrollment

Please note that graduate students in all programs are required to remain continuously enrolled throughout the duration of their programs unless they specifically ask for a leave of absence. Please see the leave of absence policy below.

#### Leave of Absence

Enrolled graduate students at the University of Kentucky that sit out for one or more semesters will need to complete a new application and pay the application fee in order to be considered for readmission. In many instances this requirement can be avoided by requesting a "leave of absence". In addition to avoiding the application process, this status will allow the student to priority register in preparation for their return to UK.

Procedurally, students should contact their Director of Graduate Studies (DGS) to seek approval for the leave **prior to the beginning of the semester** in question. If approved, the DGS will contact their Graduate School admissions officer who will modify the record accordingly. No more than two consecutive and four total semesters in leave of absence status may be requested. International students considering a leave of absence are strongly encouraged to discuss their plans with the Office of International Affairs, Department of Immigration Services prior to making a formal request.

International students considering a leave of absence are strongly encouraged to discuss their plans with the UK International Center (formerly the Office of International Affairs), Department of Immigration Services prior to making a formal request.

#### Readmission

To gain readmission, you must reapply to both the Graduate School and the MS in Epidemiology program to be readmitted and pay the Graduate School application fee. An application for readmission to the MS in Epidemiology program consists of a letter explaining how you intend to complete your degree in a timely manner and a letter of support from a current member of the department faculty. Applications for readmission will be reviewed by the MS program faculty at a regularly scheduled program faculty meeting.

Note: Program faculty meetings do not necessarily occur during the summer. Readmission should not be assumed, especially if some time has passed. Students taking extended time off from graduate study are strongly encouraged to stay connected to department faculty. Graduate School policies regarding time to degree will also have to be negotiated.

#### **Academic Progress**

The Graduate School requires that each department conduct an annual review of the academic progress of its students. We do this through a process of program faculty review and by monitoring grades. Students are provided information and support to meet deadlines required to making timely progress toward degree. MS students are strongly encouraged and expected to be self-directed learning and take an active role in their program progress.

#### **Annual Review**

Each Spring, at the last program faculty meeting of the semester, program faculty review the progress of each student and provide feedback to those identified as having some difficulty. The program minimum GPA to be considered in good standing is a 3.0, however a "C" grade in any course is considered a warning that performance is below that necessary to successfully pass the comprehensive exam or qualifying exam. "B" grades typically accompany faculty recommendations for specific improvements but are not necessarily "bad" grades. "B" grades in subjects you consider an active research area may be a warning sign that you are not reaching an appropriate level of expertise in that area. If the faculty determine that you are not making successful progress to degree, you will be contacted by your advisor (or the DGS) to develop a plan for improvement.

#### **Incompletes**

If for some reason students cannot complete the requirements of a course during the semester period, the student may request an incomplete from the instructor. It should be noted that the decision to grant the INCOMPLETE is at the discretion of the instructor. INCOMPLETEs should only be considered as an option if part of the work of a course remains undone and if there is a reasonable possibility that a passing grade will result from completion of the work. Requests for new completion dates and requirements should be included in the request for the incomplete.

#### Termination from the Program

Program faculty may terminate a student's enrollment in the MS degree program based on any of the following

- Scholastic probation (less than 3.0) for more than three enrolled semesters.
- Having failed twice the project/final exam.

#### Academic Integrity, Cheating, and Plagiarism

Students are expected to adhere to the highest standards of academic honesty. Cheating, plagiarism, and destruction of course materials violate the rules of the University. For more information on the University's policy on Students Rights and Responsibilities see the following website:

#### https://studentsuccess.uky.edu/student-conduct.

Violations of the university's rules regarding academic honesty can lead to a failing grade in the course and suspension, dismissal, or expulsion from the University. Instances of academic dishonesty will be reported to appropriate University officials as required by University rules and procedures. Not knowing the policies is not an excuse, so make sure you read Parts I to IV of the website.

A link to a paper "Plagiarism: What is it?" may be found at the Ombud web site or can be accessed at <a href="https://ombud.uky.edu/students/what-plagiarism">https://ombud.uky.edu/students/what-plagiarism</a>.

Students who witness a violation to academic integrity, cheating, and/or plagiarism must report any violation to their Academic Advisor or Program Director within a week of the incident. In addition to University process, policy, and imposed procedures for these infractions, other actions may be recommended by the College of Public Health.

#### Class Attendance

Every student is expected to attend all class sessions, including laboratories, other outside-the-classroom activities as deemed necessary by the course instructor, and to complete all examinations. Each instructor determines his/her individual policy for class attendance, completion of assigned work, absences at announced and unannounced examinations and excused absences. A student has the right to expect this policy to be in writing and given to him or her by the first or second meeting of the class. Failure to comply with these rules may result in lowered grades.

In all cases, the student bears the responsibility for notifying the instructor of any missed work and for making up any missed work. If feasible, the instructor may give the student an opportunity to make up the missed work or examination missed due to an absence during the semester in which the absence occurred.

#### Class Cancellations

The University never entirely closes, but there may be a rare cancellation of classes due to inclement weather. Announcements of cancellation or delay of classes normally will be made by 6 a.m. through the local media.

The latest information will be on the UK Infoline at (859) 257-5684, UK Cable Channel 16, or UK website, <a href="http://www.uky.edu">http://www.uky.edu</a>. Those students who are participating in an off-site experience will be expected to follow the cancellation/ closing policies of the agency/clinic/company where they are assigned.

#### Confidentiality and Disclosure

The Family Education Rights and Privacy Act of 1974 (FERPA, also known as the Buckley Amendment) provides basic privacy rights to students in regard to their academic transcripts. Under FERPA provisions, students have the right to have their academic record kept separate and confidential unless they consent in writing to have it released. However, FERPA also provides that the College of Public Health may disclose (to University personnel) the student's academic record without the student's consent when the person requesting the information has a legitimate educational interest and the information is used under the following disclosure guidelines and for the purpose of:

- 1. Academic advising
- Writing a letter of recommendation requested by the student. (If the student is requesting a letter be sent to someone outside the University of Kentucky, the Release of Information Consent Form must be completed: <a href="https://admission.uky.edu/sites/default/files/2021-09/consent\_form\_academic\_records.pdf">https://admission.uky.edu/sites/default/files/2021-09/consent\_form\_academic\_records.pdf</a>.

- 3. Selecting students for honorary organizations
- 4. Informing community-based faculty members serving as preceptors
- 5. Responding to a directive pursuant to law or court order

#### Confidentiality of Student Records, Address Information, and Student Rosters

Transcripts and grade information will be released only upon written authorization from the student. Directory information (name, address, telephone listing, date and place of birth, major, dates of attendance, degrees, and most recent educational institution attended) will be released without authorization unless the student notifies the Registrar in writing to the contrary. Official University of Kentucky College of Public Health student records are kept by the Office of Student Engagement, Advising and Success, with access restricted to authorized personnel.

The College of Public Health does NOT make lists of students, addresses, phone numbers, e-mail addresses, etc. available to anyone other than students, faculty and staff of the school. Students are instructed NOT to distribute the lists of their classmates to individuals outside the College.

At UK, students can use the UK website to access important information, including grades, student schedules and registration information. Students also can update their addresses and other information, <a href="https://myuk.uky.edu/irj/portal">https://myuk.uky.edu/irj/portal</a>.

#### Diversity, Equal Educational and Employment Opportunities

The College of Public Health and University of Kentucky strive to develop an environment where the value of diversity among students, faculty and staff is accepted, encouraged and embraced. Diversity encompasses differences in age, ethnicity, gender, national origin, race, religion, sexual orientation, socioeconomic background and unique individual style. The individual characteristics, talents and contributions of all people are valued and recognized for the unique contribution they make to our College. The following statement, required on all official UK documents, guides all admissions and employment practices, and represents the best expression of the CPH commitment to diversity.

The University of Kentucky is committed to a policy of providing educational opportunities to all qualified students regardless of economic or social status, and will not discriminate on the basis of race, color, religion, sex, marital status, beliefs, age, national origin, sexual orientation, or physical or mental disability.

#### Drug Free Institution

The Drug-Free Workplace Act of 1988 and the Drug-Free Schools and Communities Act Amendment of 1989 set a standard of behavior, which affects students who are on University of Kentucky property, on University business, or at University-sponsored events. The University policy, as well as the laws from which the policy is derived, define conduct related to the unlawful possession, use, dispensation, distribution or manufacture of alcohol or illicit drugs. Students found in violation are subject to disciplinary action up to and including suspension or termination. The Drug-Free Institution Policy can be found here, <a href="http://www.uky.edu/HR/policies/hrpp013.html">http://www.uky.edu/HR/policies/hrpp013.html</a>.

#### Healthcare Colleges Code of Professional Student Conduct (HCC Code)

The Healthcare Colleges Code of Student Professional Conduct (HCC Code) provides the standards of professional conduct and procedures to be followed when questions arise about the professional, moral

or ethical character of a student enrolled in courses or programs, including clinical programs, in the healthcare colleges, <a href="http://www.uky.edu/regs/files/HCCcode.pdf">http://www.uky.edu/regs/files/HCCcode.pdf</a>.

#### **Procedure for Complaints**

Individual students having a complaint about any aspect of the Program should first take their complaints to the Director of the Program. If the Director cannot resolve the issue, the complaint should then be taken to the Associate Dean for Academic Affairs in the College of Public Health. The Dean of the College of Public Health is the next administrative level for student complaints. Following initial review, a student may choose to approach the Graduate School (for graduate programs) and/or the University Ombud for undergraduate and professional programs.

#### Smoke-Free Environment

On April 22, 2008, the UK Board of Trustees gave final approval to the revised version of the university policy that outlines the university's smoke-free policy. Tobacco use is not allowed on University property.

#### Additional Information

For additional information, please see the following links (please note this list is not exhaustive):

The Graduate School: http://gradschool.uky.edu/

- · Academic Load
- Degree Completion
- Financial Aid/Funding Opportunities Forms
- Academic Calendar
- Registration Information Tuition & Fees

The Graduate School Bulletin: http://gradschool.uky.edu/graduate-school-bulletin

- · Academic Load
- Add/Drop and Withdrawal
- Grades and Grade Point Average
- Leave of Absence/Readmission
- Repeat Option
- Scholastic Probation
- Termination
- Transfer of Credits

The student success page: http://www.uky.edu/studentacademicsupport/

# Resources for Students Outside of the Classroom

#### **Student Organizations**

University of Kentucky Student Public Health Association (UKSPHA)

Per the SPHA Facebook:

The University of Kentucky Student Public Health Association is a student organization at UK associated with the Kentucky Public Health Association. The purposes of the UKSPHA chapter are to provide a

mechanism for member interaction with practicing public health professionals, to advance the formation and implementation of sound public health policy, and to increase the awareness of the opportunities and challenges that public health issues offer to health and public health professionals. We also strive to involve our group in consistent community service and outreach in central Kentucky.

#### **Graduate Student Congress**

The mission of the Graduate Student Congress (GSC) is to unify and represent graduate students, professional students, and postdoctoral scholars at the University of Kentucky in matters affecting quality of life, and to facilitate interdisciplinary collaboration and professional development through seminars, forums, outreach programming, advocacy, and community enhancement. You can learn more at <a href="https://www.uky.edu/gsc/">https://www.uky.edu/gsc/</a>.

#### Delta Omega-Beta Gamma Chapter

Delta Omega is the honorary society for graduate students in public health. The Society was founded in 1924 at Johns Hopkins University School of Public Health. There are currently 108 chapters throughout the United States and Puerto Rico. Membership in Delta Omega is by invitation to students with exceptionally high GPAs who also have promising leadership potential in Public Health. An induction ceremony is held at UK each spring for students during their graduating year. For information about the Beta Gamma Chapter at the University of Kentucky College of Public Health, contact Dr. Julia Costich, (859) 257-6712, Julia.costich@uky.edu.

#### University of Kentucky Academy Health Student Chapter

AcademyHealth is the professional home for health services researchers, policy analysts, and practitioners, and a leading, non-partisan resource for the best in health research and policy. The Chapter was formed to acquaint students with the fields of health services research (HSR), public health systems and services research (PHSSR), and health policy, provide learning opportunities through interaction with health services researchers and health policy practitioners and help expand chapter members' career opportunities. For more information visit http://www.academyhealth.org/index.cfm.

#### Other Student Organizations

For a complete list of student organizations, please see the following link: <a href="http://getinvolved.uky.edu/">http://getinvolved.uky.edu/</a>

#### Resources for Students with Disabilities

The Disability Resource Center (DRC) provides services to the University community so students with disabilities have an equal opportunity to fully participate in all aspects of University life. (https://www.uky.edu/DisabilityResourceCenter/) Services include:

- Consultation Services
- Accommodated Test Proctoring Services
- Alternative Text and Assistive Technology Services
- Deaf/Hard of Hearing
- Service and Comfort Animal Registration
- Temporary Disability Services
- Workforce Recruitment Program
- Door to Door Transportation Services

For a student to qualify for accommodations due to a disability they must provide a letter from the DRC. More information about faculty including how to schedule an exam can be found here: https://www.uky.edu/DisabilityResourceCenter/content/faculty

#### Academic Resources

There are many academic resources available to help students.

#### **Computing Services**

The Division of Customer Support & Student IT Enablement maintains 8 computer labs that are spread out across the campus where students can find the necessary hardware and software to complete their assignments and projects. <a href="https://www.uky.edu/its/customer-support-student-it-enablement/computer-labs">https://www.uky.edu/its/customer-support-student-it-enablement/computer-labs</a>

#### University of Kentucky Libraries.

The university libraries offer a wide variety of services to help both students and faculty. (<a href="http://libraries.uky.edu/">http://libraries.uky.edu/</a>) Services include

- Academic Liaisons
- Class and meeting room reservations
- Research help and services
- Study space reservations
- Student printing

#### The Writing Center.

The Writing Center offers free and friendly help to all UK students, faculty, and staff. We assist with writing, speaking, and multimedia assignments across the curriculum. We offer advice on academic, creative, and professional projects. (https://wrd.as.uky.edu/writing-center)

#### **CARES**

CARES will provide a comprehensive academic support system as well as enrichment services to aid in increasing the retention and graduation rates of underrepresented students. Programs and activities assist students in achieving academic excellence and adjusting to student life at the University of Kentucky. (<a href="https://www.uky.edu/cares/">https://www.uky.edu/cares/</a>) CARES Services include

- Academic Planning
- Free Tutoring
- Study Skills
- Help with Personal Issues
- Computer Lab

#### **Tutoring**

There are many places on campus where students can find a tutor. You can find many of the resources by visiting: <a href="https://www.uky.edu/studentacademicsupport/free-tutoring-and-coaching-resources">https://www.uky.edu/studentacademicsupport/free-tutoring-and-coaching-resources</a>

# University Policies and Procedures

#### University of Kentucky Social Media Policies

You can find the Universities social media polices and guidelines here: <a href="https://www.uky.edu/regs/sites/www.uky.edu.regs/files/files/ar/AR10-4.pdf">https://www.uky.edu/regs/sites/www.uky.edu.regs/files/ar/AR10-4.pdf</a>

#### Acts and Policies

You should be aware of the following acts and policies.

- Family Educational Rights and Privacy Act (FERPA). <a href="https://www.uky.edu/registrar/FERPA-privacy">https://www.uky.edu/registrar/FERPA-privacy</a>
- Request for student and university information. <a href="https://www.uky.edu/deanofstudents/student-records">https://www.uky.edu/deanofstudents/student-records</a>
- Americans with Disabilities Act (ADA). <a href="https://www.uky.edu/eeo/ada-compliance">https://www.uky.edu/eeo/ada-compliance</a>
- Title IX of the Education Amendments of 1972. https://www.uky.edu/eeo/title-ix