colorado school of public health

UNIVERSITY OF COLORADO
COLORADO STATE UNIVERSITY
UNIVERSITY OF NORTHERN COLORADO

Graduate Programs in Epidemiology

2024-2025 Student and Advisor Handbook

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Message from the Associate Dean for Academic and Student Affairs



Welcome to the Colorado School of Public Health!

It is with great pleasure that I greet you as the newest members of our academic community. Your decision to join us marks the beginning of an exciting and impactful journey toward improving public health and health equity, and advancing the well-being of our community, and other communities around the world.

We are a collaborative School dedicated to fostering an environment where you can thrive both academically and personally. Here, you

will have access to innovative learning opportunities, cutting-edge research, and a supportive network committed to your success. Throughout your time with us, you will engage in rigorous coursework, collaborate on meaningful projects, and develop the skills necessary to address some of the most pressing health challenges of our time.

I encourage you to take full advantage of the resources and opportunities available to you. Participate in research projects, join student organizations, attend seminars and workshops, and seek out mentorship and networking opportunities. These experiences will not only enhance your education but also help you build a strong foundation for your future career in public health.

As you embark on this new chapter, remember that you are not alone. We are here to support you every step of the way. Together, we will work towards a healthier, more equitable future for all.

Once again, welcome to the School of Public Health. We are thrilled to have you with us and look forward to witnessing all that you will achieve.

Sincerely,

Madiha Abdel-Maksoud, MD, PhD, MSPH Associate Dean for Academic and Student Affairs

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Message from the Directors of the Graduate Programs in Epidemiology

Welcome to the Epidemiology Department!

You are joining an enthusiastic group of colleagues working together to improve population health through discovery, education and community engagement. Faculty in the Epidemiology Department conduct innovative research in diverse areas including etiology and prevention of diabetes in youth and adults, genetic epidemiology, infectious disease, injury prevention, nutrition and environmental health to list just a few. Our goal is to train the next generation of scientist leaders in the ever-evolving and essential field of epidemiology. We work with our students to apply their research interests to a variety of health problems in Colorado and across the world. We are a tight-knit department with high levels of student engagement. Our students not only receive training to guide a dynamic career, but also establish friendships and collegial relationships that last a lifetime.

As the co-directors of the Epidemiology MS and PhD programs, we sincerely welcome you to the Colorado School of Public Health.

Sincerely,

Alison G Abraham, PhD, MS, MHS, and Randi K Johnson, PhD, MPH





Revised August 2024

Handbook Changes Policy

This handbook complements the policies and procedures of the Graduate School. It includes information specific to the Colorado School of Public Health and the Epidemiology Graduate Programs. Please retain it for reference on academic policies, thesis, graduation, and other topics. This handbook was accurate and up to date when printed in August 2024. It does not constitute a contract with the University of Colorado Denver, either expressed or implied. The Graduate School and the Epidemiology Graduate Programs reserve the right at any time to change, delete, or add to any of the provisions at their discretion. Furthermore, the provisions of this document are designed to serve as firm guidelines rather than absolute rules, and exceptions may be made on the basis of extenuating circumstances.

Websites

School Site:

https://coloradosph.cuanschutz.edu/

Program Site:

https://coloradosph.cuanschutz.edu/education/departments/epidemiology

ColoradoSPH Academic and Student Affairs Resources: https://coloradosph.cuanschutz.edu/resources/for-current-students

Graduate School Policies and Resources:

http://www.ucdenver.edu/academics/colleges/Graduate-School/Pages/default.aspx

Colorado School of Public Health

Overview

The Colorado School of Public Health is a collaborative school of public health with the University of Colorado, Colorado State University, and the University of Northern Colorado. It is the first school of public health in a nine-state region of the Rocky Mountain West.

Emerging infectious diseases, chronic diseases, emergencies, lifestyles, the environment, disparities and various other factors impact the health of our communities. The Colorado School of Public Health aims to meet the challenges that our communities face by preparing a public health work force with the skills, research, knowledge, and values necessary to advance the health of our communities. The combined faculty, located at the three partner institutions, is at the forefront of various health issues and research, proactively addressing and improving the lives of our children, adults and aging populations.

As part of the commitment to meeting the training and research needs of the public health workforce, the Colorado School of Public Health offers educational programs that include masters, doctoral, residency, and certificate programs. Descriptions and materials are available through the Colorado School of Public Health website.

Mission Statement

Our mission statement is comprised of four key components:

Reimagine Public Health Education

As a premier school for public health leaders and workforce, we create a dynamic and engaging educational experience that prepares students to partner with a diverse array of communities and populations to address the most daunting public health problems.

Pursue and Champion Health Equity

We are resilient in our pursuit of health equity, with a focus on elevating equity, diversity, inclusivity, and access as a core pillar of our mission. Our dedication ensures that every individual can achieve optimal health.

Centered in Science, Proven in Practice

Our signature approach merges scientific research with practical application. By grounding our work in evidence-based methodologies, we translate academic insights into tangible health improvements and as such, are indispensable to our constituents.

Connect to Community, Build Partnerships for a Healthier Future

At the heart of our mission are strong community connections and partnerships. We are indispensable to our partners and promote innovation that lays the foundation for thriving, healthier communities in all public health communities.

Uplift and Empower Our People to Thrive

Our faculty, staff, and students are the foundation of our entire organization. We recognize their individual strengths, champion their growth, and foster a sense of belonging among all members of our school community. We create an environment where our people thrive so that they can help others to thrive.

Vision Statement

Public Health Elevated. Rising Together for a Healthier Future for All

"Public Health Elevated."

What This Means: We are not just reimagining public health at Colorado School of Public Health; we are leading the charge in public health education, championing health equity, conducting innovative research, and connecting and building partnerships for a healthier future. The vision is about elevating how we advance, teach, research, and deliver public health. "Rising Together for a Healthier Future for All"

Our Commitment: This line is crucial. It defines us. We believe in a healthier future shared by everyone and we aspire to do all that we can to achieve this goal. We are a community that collaborates across our three campuses, with the communities that we serve, and with public health partners across the state and around the globe to work towards the improvement of health for all people. As champions of health equity, we address inequities through our research, teaching, and practice, engaging authentically with communities, locally and globally.

Diversity Statement

Our goal is to build a diverse and representative academic community that recognizes the importance of social, economic, health, and environmental justice. We strive to promote diversity and equity and to be a model of inclusive excellence.

As a tri-campus partnership, ColoradoSPH stands with academic, practice, and community partners nationwide to condemn racism, injustice, and inequity. Racism is a public health crisis, and we are committed to dismantling structural racism. Ableism, ageism, homophobia, misogyny, racism, transphobia, xenophobia, and all other forms of hatred or discrimination will not be tolerated. We are committed to recognizing and confronting our internalized racism and implicit biases and constantly striving to act in ways that affirm and support students, staff, faculty, leadership, alumni, and communities with whom we engage.

Land Acknowledgement

As we gather, we honor and acknowledge that the University of Colorado's four campuses are on the traditional territories and ancestral homelands of the Cheyenne, Arapaho, Ute, Apache, Comanche, Kiowa, Lakota, Pueblo, and Shoshone Nations. Further, we acknowledge the 48 contemporary tribal nations historically tied to the lands that we now call Colorado.

Please see the full CU Systemwide Lands Recognition statement: https://president.cu.edu/statements/cu-systemwide-lands-recognition-statement

Labor Acknowledgement

As we gather, it is important to acknowledge that much of what has been built in this country, including culture, economic and physical structures, was made possible by the labor of enslaved peoples, specifically Africans, and their ascendants. Those who were exploited, oppressed, and suffered through the horrors of transatlantic trafficking, chattel slavery, and Jim Crow. As such, we are indebted to their labor and sacrifice and acknowledge that we are still experiencing reverberations of this violence today through continued acts of violence, systemic structural bias and racism, and sanctioned exploitation.

Accreditation

The Colorado School of Public Health was first accredited from the Council on Education for Public Health (CEPH) 2010. CEPH is an independent agency recognized by the U.S. Department of Education to accredit schools of public health and public health programs outside of schools of public health. As an accredited school of public health, graduates at the masters and doctoral levels are eligible to sit for the Public Health Certification examination.

Administration		
University Leadership & Academic Partners		
Donald M. Elliman Jr. Chancellor, University of Colorado Anschutz Medical Campus	Andrew Feinstein, PhD President, University of Northern Colorado	
Joyce McConnell, JD, LLM President, Colorado State University		
Colorado School of Public Health Leadership		
Cathy Bradley, PhD Dean	Dana Debelea, MD, PhD Associate Dean for Research	

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Associate Dean for Academic and Student Affairs	Associate Dean for Public Health Practice
Sam MaWhinney, ScD	Gary Heise, PhD
Associate Dean for Faculty Affairs	Interim Director, University of Northern Colorado
Christine Gillen, MS	Tracy Nelson, PhD, MPH
Associate Dean for Finance and Administration	Director, Colorado State University
Cerise Hunt, PhD, MSW	Michelle Kuba, MPH
Associate Dean for Equity, Diversity and Inclusion	Assistant Dean of Operations
Department Chairs	
Beth Carlton, PhD, MPH	Jill Norris, PhD, MPH
Chair, Environmental and Occupational Health	Chair, Epidemiology
Jenn Leiferman, PhD	Glen Mays, PhD
Chair, Community and Behavioral Health	Chair, Health Systems, Management & Policy
Debashis Ghosh, PhD	
Chair, Biostatistics and Informatics	
Colorado School of Public Health Staff	
Katherine Brumfield, MA	Thuy Nguyen, MPS
Career Services Manager	Assistant Director of Human Resources
Tonya Ewers	TBD
Tonya Ewers Director of Communications & Marketing	
Tonya Ewers Director of Communications & Marketing Anna Christiansen	TBD Admissions Processing Specialist TBD
Tonya Ewers Director of Communications & Marketing	TBD Admissions Processing Specialist
Tonya Ewers Director of Communications & Marketing Anna Christiansen Student Life Coordinator Katie Guthmiller	TBD Admissions Processing Specialist TBD Executive Assistant to the Dean Tony Romero, MA
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Tonya Ewers Director of Communications & Marketing Anna Christiansen Student Life Coordinator Katie Guthmiller Recruitment & Outreach Program Manager Laura Hager	TBD Admissions Processing Specialist TBD Executive Assistant to the Dean Tony Romero, MA Assistant Director, Evaluation & Accreditation Brenda Witt
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Tonya Ewers Director of Communications & Marketing Anna Christiansen Student Life Coordinator Katie Guthmiller Recruitment & Outreach Program Manager Laura Hager Associate Director for Admissions and Student Affairs Graduate School Jen Richer, PhD Dean Bruce Mandt, PhD Associate Dean and Director	TBD Admissions Processing Specialist TBD Executive Assistant to the Dean Tony Romero, MA Assistant Director, Evaluation & Accreditation Brenda Witt Academic Affairs Program Manager Teresa Bauer-Sogi Manger of Academic Services Kristine Sikora, PhD Associate Dean and Director

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Frequently Used Phone Numbers				
Name:	Phone Number	Room		
ColoradoSPH Office of Academic and Student Affairs	303-724-4613	Fitzsimons Bldg, Rm E3360		
Alison Abraham, Program Co-Director	303-724-8378	Fitzsimons Bldg, Rm W3143		
Randi Johnson, Program Co-Director	303-724-3078	AHSB, Rm 7104		
Brenda Witt (Academic Affairs Specialist)		Fitzsimons Bldg, Rm E ₃₃ 00		
Campus Office:	Phone Number	Room		
Bookstore	303-724-2665	Ed ₂ S, 1 st Fl		
Bursar's Office	303-556-2710	Ed ₂ N, 3rd Fl		
Campus Information	303-724-6245			
CU Online Help Desk (Canvas)	303-315-3700			
Disability, Access, and Inclusion	303-724-8428	Hlth Sciences Lib, V23-1409A1		
Health Sciences Library	303-724-2152	12950 E. Montview Blvd.		
Financial Aid Office	303-724-8039	Ed2 N, 3rd Fl		
Graduate School	303-724-2915	Fitzsimons Bldg, Rm W5107		
Ombuds				
(Counseling Services/Conflict Resolution)	303-724-2950	Fitzsimons Bldg,, Rm C7005		
Parking	303-724-2555	Fitzsimons Bldg, 1st Fl West		
Payroll	303-735-6500	Boulder Campus		
Registrar	303 724-8059	Ed ₂ N, 3rd Fl		
Student Assistance Office	303-724-7686	Ed ₂ N, 3rd Fl		

General Information

Computer Labs

Research and study opportunities are enhanced through the various resources available to students, including: student computing labs (Ed1 CTL P26-1501, Ed2 N CTL P28-2201 & RC1 N CTL P18-1309) and student rooms in the Education 1, Education 2, and the Research 1 North Buildings.

Scheduling Rooms for Meetings or Defense

All room scheduling and reservations on the Anschutz Medical Campus can be requested through the EMS system: https://schedule.ucdenver.edu/EMSWebApp/

To schedule the conference rooms (Ward Darley, Teleconference Room, or Dean's Conference Room) on the 3rd Floor of the Fitzsimons Building or another room at the Anschutz Medical Campus for a committee meeting or defense, use the EMS system or contact the department administrator.

Academic Policies

Family Educational Rights and Privacy (FERPA)

Purpose of FERPA

FERPA deals specifically with the education records of students, affording them certain rights with respect to those records. For purposes of definition, education records are those records, which are:

- Directly related to a student and,
- Maintained by an institution or a party acting for the institution.

FERPA gives students who reach the age of 18 or who attend a post-secondary institution the right to inspect and review their own education records. Furthermore, the right to request amendment of records and to have some control over the disclosure of personally identifiable information from these records, shift from the parent to the students at this time.

FERPA applies to the education records of persons who are or have been in attendance in post- secondary institutions, including students in cooperative and correspondence study programs, video conference, satellite, internet or other electronic forms. FERPA does not apply to records of applicants for admission who are denied acceptance or, if accepted, do not attend an institution.

Directory Information

FERPA directory information is information contained in your education record that generally would not be considered harmful or an invasion of privacy if disclosed. Under current CU Denver policy, the following information is designated as directory information:

- 1. name
- 2. address, telephone number, and email address
- 3. dates of attendance
- 4. registration status
- 5. class
- 6. major
- 7. awards
- 8. honors
- 9. degrees conferred
- 10. photos

Although these items are designated by CU Denver as directory information, only a limited amount of this information is routinely disclosed by CU Denver officials and the University retains the discretion to refuse to disclose directory information if it believes such disclosure would be an infringement of your privacy rights.

Nondisclosure of Directory Information

Students may ask the university not to publicly disclose directory information. Please note, however, that if you are seeking employment, the Registrar's Office cannot release your enrollment, degree status or major to anyone unless you come to the Registrar's Office with a photo ID.

Forms to prevent disclosure of directory information can be obtained at The Anschutz Medical Campus Registrar's Office or via the Registrar's website at http://www.ucdenver.edu/student-services/resources/registrar/Pages/default.aspx. Questions regarding your rights under FERPA should be directed to the Registrar's Office:

Anschutz Medical Campus:

Phone: 303-724-8059 Fax: 303-724-8060

Email: Registrar@CUAnschutz.edu

For additional information regarding FERPA, please visit the complete policy on the Registrar's website at:

https://www.ucdenver.edu/registrar/student-resources/ferpa

Immunization Policy

To ensure that a minimum standard of public health and safety is provided for our faculty and students, all students matriculating into any ColoradoSPH program are required to provide proof of immunizations for measles, mumps, rubella, and tuberculosis through CastleBranch. Other immunizations via CastleBranch are due at least two weeks prior to the start of a student's first term in the program. Students who do not submit immunization records at the specified time may experience a hold on future registration and/or be administratively withdrawn from classes until proof of immunizations has been received.

Health Insurance Requirement

All CU Anschutz Medical Campus students enrolled in a degree-seeking program and financial aid eligible certificate programs taking 1 or more credit hours are automatically enrolled into the student health insurance plan unless a waiver is submitted and approved by the stated deadline. The insurance waiver form may be found on the health insurance website and must be completed once per academic year to waive both medical and/or dental insurance. Please check with the student health office on your home campus for more information. Details regarding eligibility, forms, deadlines, and cost can be found here:

https://www.cuanschutz.edu/student/health-wellness/student-health-insurance

Background Check Policy

Students matriculating into any ColoradoSPH degree-seeking program are required to pass a

criminal background investigation. The background check is conducted during the admissions process.

Students are required to pay a non-refundable processing fee for conducting the background check. Students who work at the university also need to submit the processing fee and complete the student background check, as additional criteria are specified beyond that required for employment. This must be completed before course registration can begin.

Student Academic Honor and Conduct Code

Education at the Colorado School of Public Health (ColoradoSPH) is conducted under the honor system. Matriculation at the Colorado School of Public Health implies the acceptance of, and adherence to, the Student Academic Honor and Conduct Code. All students who have entered graduate and health professional programs should have developed the qualities of honesty and integrity, and each student should apply these principles to his or her academic and subsequent professional career. All students are expected to have achieved a level of maturity reflected by appropriate conduct at all times. The Honor and Conduct Code of UC Denver, and the Academic Appeals Process of the Graduate School also govern epidemiology Graduate students. Please see the Graduate School policies here:

https://graduateschool.cuanschutz.edu/forms-resources/<u>resources</u>
Although it is not possible to list every situation that violates the Student Academic Honor and Conduct Code, the following examples provide a frame of reference:

1. Academic Honesty

Students should adhere to the highest standards of academic honesty and integrity. Examples of behavior that violate these standards include, but are not limited to: plagiarism (including the undocumented or improperly documented use of internet and web-based information), cheating, copying solutions from solutions manuals or from tutors, and using it as your own work, citing references not used in your work, illegitimate possession and/or use of examinations, violation of the ethical standards for conducting research, and falsification of official records.

2. Professional Conduct

As future health professionals, students should also adhere to the highest standards of professionalism. Examples of unprofessional conduct include misrepresentation of effort, credentials, or achievement in either the academic or professional setting; any action that compromises the quality or safety of patients, study participants, or the public; violation of patient or study participant confidentiality; institutional review board (IRB) violations; forgery, alteration, or misuse of any university document, record, or instrument of identification; disorderly, lewd or indecent conduct; disrespectful communications in all forms including verbal, written, and email; failure to be accountable or take responsibility for one's actions; and any other conduct unbefitting a professional public health practitioner, researcher, or educator.

3. Alcohol and Drug Use

Excessive alcohol and/or drug use compromises the student's ability to learn and to practice as a public health professional and thus is considered unprofessional conduct. Students who misuse alcohol and/or drugs should seek assistance from services available on campus or elsewhere. The sale of drugs or the possession of narcotics (unless prescribed by a medical doctor) is against the law. To minimize the potential for excessive alcohol use at campus functions, students must adhere to current University policy governing the consumption of alcohol on campus.

4. Respect for the Rights and Property of Others

Students should always conduct themselves in a manner that recognizes the rights and property of others. Examples of prohibited behavior include: theft, damage to University or personal property of others, disruption of educational or other activities on campus, illegal use of University facilities, sexual harassment, physical assault, violation of academic honesty standards in a way that affects other students or faculty, such as in a group or collaborative project, and any conduct that threatens the health or safety of others.

5. Adhere to all state and local public health and safety orders and campus public health and safety policies.

Students are responsible for knowing and following all health and safety orders and policies. Examples include the wearing of face coverings, guidelines for social gatherings and events, quarantines, isolation, orders to shelter in place, and any other public health and safety orders and policies.

Any student found to have committed acts of misconduct (including, but not limited to cheating, plagiarism, misconduct of research, breach of confidentiality, or illegal or unlawful acts) will be subject to the procedures outlined in the Honor Code.

Additional information regarding the ColoradoSPH Honor Code can be found online at:

https://coloradosph.cuanschutz.edu/education/calendars-policies

Academic Grievance Policy

The Colorado School of Public Health recognizes that a student may have grievances about different aspects of his or her academic program. ColoradoSPH is committed to addressing these grievances promptly and professionally and reaching a fair resolution through a formal and unbiased process. In the statements below, Associate Dean refers to the ColoradoSPH Associate Dean for Academic Affairs.

Student Rights

All ColoradoSPH students have the right to:

- 1. Competent instruction
- 2. Access to instructors outside of class during a specified set of office hours or by appointment
- 3. Clearly understand the grading system by which he or she will be judged, and expect that the grading system as determined by the instructor will be adhered to for the

- duration of the course
- 4. Be treated with respect and equality
- 5. Be treated fairly according to standards stated within the student handbook and each course syllabus

Formal Grievance Process

Step 1

Because the filing of an Academic Grievance is considered a serious matter, the student is strongly encouraged to seek informal resolution first by discussing the matter with the faculty member or administrator involved. The student and faculty/administrator should document the date, time, and outcome of the meeting for future reference. If the student feels he or she needs assistance in discussing or resolving the issue, a University of Colorado Denver Ombuds person is available to help students facilitate a resolution related to any type of grievance. That office can be reached at 303.724.2950. Additional information about the Ombuds Office can be found on their website: https://www1.ucdenver.edu/offices/ombudsoffice

Step 2

The student should contact the Chair of the Department to which the faculty member belongs. The Chair and the student will work together to resolve the grievance informally. At their election, the Associate Dean may be asked to facilitate these conversations. The student might seek guidance from the Associate Dean in this step. The Associate Dean will act as a mediator between the student and faculty member to help resolve any miscommunications between the parties.

Step 3

If an informal resolution cannot be reached, the Associate Dean will meet with the student to determine if the grievance is one that can be legitimately pursued through the official grievance process.

Step 4

If the Associate Dean and the student agree to move forward, the Hearing Committee must be constituted within 30 days of indication from the student or the chair that the grievance cannot be resolved at the department level.

Step 5

A report will be prepared by the Associate Dean to include a personal statement from the individual filing the grievance or appeal outlining the grievance or appeal, the date(s) of the alleged incident, and all supporting documentation and evidence. This report will be sent to the faculty member with whom the grievance has occurred.

Step 6

Hearing Committee members shall be contacted to schedule a hearing. All committee members shall commit to being present on the agreed date and time.

Step 7

One week in advance of the hearing, all Hearing Committee members will be informed in writing of the hearing committee composition, the Associate Dean's written report, any other evidence and testimony to be presented, and the resolutions each party believes to be acceptable.

Step 8

On the date of the hearing, the Hearing Committee will privately and separately interview each party. At that time, any additional information, documentation and testimony regarding the grievance can be introduced. All testimony will be audio recorded for accuracy. The recording will be destroyed at resolution of the grievance.

The Associate Dean, or his/her designee, shall be present at the hearing. The Associate Dean will not have voting power, but will oversee the hearing to ensure procedures are followed, proceedings are conducted with respect for all parties, and that all parties are satisfied that their testimony was presented.

Step 9

All testimony and documentation will be strictly confidential. This confidentiality will be waived only if the grievance hearing results in legal action to the extent that grievance testimony and documentation need to be available to the court. All parties shall be advised that no hearing participant should use any information from the hearing in any way to affect future interactions among the parties.

Step 10

The Hearing Committee will send a formal written recommendation to the Associate Dean of the ColoradoSPH within five (5) working days. The Associate Dean will make a formal recommendation to the Dean based on all of the evidence and testimony within five (5) working days of receipt of the Hearing Committee's recommendation.

Step 11

All parties will consider the Dean's decision final and binding.

Step 12

Upon acceptance of the formal decision by the Dean, the Associate Dean will be notified and will inform all relevant parties of the decision. It is the intent of the Colorado School of Public Health that all individuals associated with the ColoradoSPH have the right to bring grievances to the appropriate School officials and that they be granted full opportunity to be heard, treated with respect, and due process as they seek redress of their grievances. The full Academic Grievance policy can be found online at:

https://coloradosph.cuanschutz.edu/education/calendars-policies

Other Resources for Incident Reporting

Office of Professional Excellence (OPE) for lapses in professionalism

Description: A private resource to obtain a fair and equitable process and resolution for all matters pertaining to professionalism concerns regarding students, residents, fellows, staff members, and faculty in any school or college on AMC. The goal is to help those who have been involved in an incident to return to being valued and productive members of the Anschutz Medical Campus community.

Contact: To provide a safe environment for reporting a lapse in professionalism, there are a variety of ways to contact the OPE. Note: While the OPE will take all measures to ensure the privacy of information, complete confidentiality cannot be quaranteed

Website: https://www.cuanschutz.edu/offices/professionalism

Phone: 303-724-4PRO (4776)

E-mail: <u>Professionalism@cuanschutz.edu</u>

Online Report Form

CU Denver OMBUDS Office for any type of interpersonal conflict

Description: Provides an alternative forum for prompt, impartial, and confidential discussion for individuals to review options for the informal resolution of differences. OMBUDs assists people with disagreements and a variety of conflict-related issues, such as working conditions, interpersonal interactions, grades, policies and procedures, sexual harassment, discrimination, and disciplinary actions. The Ombuds Office possesses no formal decision-making authority, but rather provides options and resources in attempting to resolve their conflicts.

Website: https://www.ucdenver.edu/offices/ombudsoffice
Contact: Melissa Conell (Anshutz) and Lisa Nelson (Denver)

Phone: (303) 724-2950

Email: Melissa.Connell@cuanschutz.edu and Lisa.G.Nelson@ucdenver.edu

University of Colorado Anschutz Medical Campus Incident Reporting for bias and discrimination incidents

Description: A mechanism to report bias incidents. Although the university will take steps to ensure the privacy of reporters and other involved parties, the University cannot guarantee confidentiality. In some cases, where individuals are identified, and violations of state or federal law may have occurred, the university may have to

report those incidents to other agencies. Note that on the form, you do not need to provide identifying information, and there is an option to request follow-up.

Contact:

Online Report Form

 Office of Equity for DEI-related issues, including micro-aggressions, accommodation requests, discrimination and sexual misconduct

Description: Initial consultation with the Office, followed by restorative action if requested.

Online reporting forms:

https://www.ucdenver.edu/offices/equity/resolutions/make-a-report

Website: https://www.ucdenver.edu/offices/equity/office-of-equity

Phone: 303.315.2567

Email: equity@ucdenver.edu

• Department of Epidemiology Health Equity Council email box for any type of incident.

Description: A group email box that reaches members of the Health Equity Council (3 faculty, 2 PhD students, 1 postdoc, 1 staff member). All incidents will be triaged and discussed at monthly meetings, with follow-up to the sender to determine next steps.

Contact:

Email: DEI-Incident-Reporting@ucdenver.edu

** Emails sent to the email box are not anonymous. If anonymity is desired, send email to Cassandra Thao (Cassandra.Thao @CUAnschutz.edu) who will remove identifying information and forward an anonymized message to the email box.

Non-Discrimination Policy Statement

The University of Colorado, including the Colorado School of Public Health, will not discriminate against any applicant, student or employee because of race, color, religion, sex, national origin, age, disability, creed, sexual orientation, or veteran status. The University of Colorado and the Colorado School of Public Health will take affirmative action to ensure that applicants, students and employees are treated without regard to their race, color, religion, sex, national origin, age, disability, creed, sexual orientation, or veteran status. The University of Colorado Non-Discrimination Policy can be found at:

https://www.cu.edu/ope/aps/5065

Sexual Misconduct Policy Statement

It is the policy of ColoradoSPH to maintain the community as a place of work, study, and residence free of sexual harassment or exploitation of students, faculty, staff or administrators. All forms of sexual misconduct, including sexual harassment, are prohibited on campus and in any of the School's programs. ColoradoSPH is committed to taking appropriate action against any member of the University community who violates the policy. No retaliation will be taken against any individual for making a legitimate complaint. It is a violation of the ColoradoSPH policy to knowingly make a false accusation. For more information, please refer to the Title IX overview:

https://www.ucdenver.edu/offices/equity/university-policies-procedures/discrimination-and-harassment

Reporting form: https://cm.maxient.com/reportingform.php?UnivofColoradoDenver&layout_id=2

Policy on Pregnancy and Parenting

The Colorado School of Public Health does not discriminate against any student on the basis of pregnancy, parenting status, or related conditions. Absences due to medical conditions relating to pregnancy will be excused for as long as deemed medically necessary by the student's doctor and the student will be given the opportunity, wherever possible, to make up missed work. Students needing assistance can seek accommodations from the Disability Services Offices (Maya Gallardo, disabilityaccess@cuanschutz.edu) or the Title IX Coordinator for ColoradoSPH (Elizabeth Schrock, 303.315.2567 or equity@ucdenver.edumailto:)

Email Policy

Email is an official means of communication for ColoradoSPH students. All official email related to enrollment at ColoradoSPH (including, but not limited to, financial aid, billing, transcripts, school announcements.) will be sent to each student's assigned CU email address (name@cunanschutz.edu), regardless of the student's home campus. Students are responsible for checking their CU email on a regular basis. The student Academic Honor and Conduct Code should be followed when using university email and other forms of university electronic communication and devices.

Students with a home campus of CSU or UNC should also frequently check their home campus email accounts, as any correspondence specifically from their home campus will be sent to that email address.

For questions regarding your CU email account, please contact the Anschutz Medical campus OIT Department at (303) 724-HELP or visit their website at:

https://www.cuanschutz.edu/offices/office-of-information-technology

Identification/Access Badges

Students are required to have an electronic security photo ID badge for the safety and protection of all faculty, staff, and students on campus. Additionally, this badge allows students access to buildings and computer labs, as well as parking surfaces.

Badge applications for the CU Anschutz Medical Campus are issued to the ID Badge Office by the

education staff prior to the start of a student's first semester in the program. Students should pick up their badges at one of the badging pickup days or make alternate arrangements with the Office of Academic and Student Affairs (coloradosph.studentaffairs@cuanschutz.edu)

Establishing Residency

The requirements for establishing residency for tuition purposes are defined by Colorado law. The statutes require that a qualified individual must be domiciled in Colorado for the twelve (12) consecutive months immediately preceding the term for which resident status is claimed.

A person's tuition classification status is initially determined from the Verification of Residency form submitted during the application process for admission. If a person is classified as a "nonresident," he or she must wait until eligible for a change in tuition classification and then file a petition for the change. Petitions that are denied may be appealed.

For more information regarding establishing residency, please visit:

CU Anschutz Medical Campus Registrar's website: https://www.cuanschutz.edu/registrar/residency/future-students

Tuition and Fees

Each semester, ColoradoSPH students receive a single bill for ColoradoSPH tuition and fees from the CU Anschutz Medical Campus Bursar's Office, regardless of their home campus affiliation (CU, CSU, UNC). At the time of matriculation, all students are charged the university matriculation fee, background check fee, and enrollment deposit. Fees associated with the student's primary campus, such as academic support fees and RTD fees are also assessed. background check fee, and enrollment deposit. Fees associated with the student's primary campus, such as academic support fees and RTD fees are also assessed.

When students take courses at a campus other than their primary campus, there are no additional general fees for taking courses outside of the primary campus, but course-specific fees may still apply. All students, regardless of their home campus, must follow the CU Anschutz payment policies and deadlines. Additional information regarding fee and billing policies can be found on the bursar's website at: https://www.cuanschutz.edu/student-finances/billing-payments

A breakdown of tuition and fees per campus can be found on the ColoradoSPH website at: https://coloradosph.cuanschutz.edu/admissions/tuition-aid/cost-of-attendance

Students must follow the published drop/add deadlines to receive a tuition refund for any dropped courses. For courses dropped before the semester's drop/add deadline, full tuition and fees will be refunded. Courses dropped after the semester's drop/add deadline will be considered withdrawals and will not be refunded tuition and fees. For more information on dropping or withdrawing from a course, see "Registration Policies" in this handbook.

The Academic Calendar, which specifies deadlines, including the drop/add deadline, can be found on the ColoradoSPH website at: https://coloradosph.cuanschutz.edu/education/calendars-policies

For students who have been approved to take a course(s) at the downtown CU Denver campus, the ColoradoSPH tuition rate will be charged for those courses, unless the student is enrolled in a dual degree program with the downtown campus. The ColoradoSPH tuition rate may be different than the downtown UCD campus rate.

Employee Tuition Benefit

Employees of the University of Colorado and their dependents may be eligible for up to 12 credit hours per year to be used for courses on a space-available basis. When using the tuition benefit, registration can occur the week prior to the first day of classes in order for tuition to be waived. Students who violate this policy are at risk of losing their tuition benefit. For the entire policy, restrictions and forms, please visit the Payroll and Benefit Services website:

https://www.cu.edu/pbs/tuition-benefit/

Employees on the CSU and UNC campuses using their employee tuition benefits may transfer in a maximum of 20 credits of approved public health coursework taken at a ColoradoSPH partner institution during the time of employment. Of these 20, a maximum of 10 non-degree credits are allowed prior to program matriculation.

Please note that CU Denver/ Anschutz Medical Campus waivers may only be applied to courses at CU Denver/Anschutz Medical Campus. ColoradoSPH's CU Denver students cannot use waivers for CSU and UNC courses. (Employees at CSU and UNC have their own system for tuition waivers.)

Financial Aid

All financial aid, regardless of a student's home campus, is processed through the CU Anschutz Medical Campus Financial Aid Office. All ColoradoSPH students interested in applying for financial aid should do so through the CU Anschutz Medical Campus. Detailed information can be found at:

https://www.cuanschutz.edu/student-finances/financial-aid

For financial aid purposes, full-time status is considered five credits per term; part-time is considered 3 credits per term.

Advisors

The program directors will serve as academic advisors to each student upon entry into the program. This is not a permanent assignment. Students may request to change advisors and often do so when putting together their examination committees. The faculty member selected to supervise the thesis, research paper or dissertation automatically becomes the student's academic advisor/mentor.

Students should meet with their advisor/mentor at least once per semester before starting work on a thesis/dissertation and should keep their advisor/mentor and the program director informed of study plans. Meetings with the advisor/mentor should occur at least monthly

once work on the thesis/dissertation begins.

Grading Policy

The program adheres to the Graduate School grading policies as outlined in the Graduate School Handbook. In addition, the program has the following grading policies:

- All coursework must be completed on time. A student may be assigned an "I" (incomplete) grade, with advance agreement from the instructor, which will convert to an F grade after one year, if the coursework has not been completed. An incomplete grade may not be used to retake a course for a better grade.
- 2. MS Thesis, MS Research Paper, and Dissertation credits are assigned the grade IP until the final written paper is complete. At that time, a letter grade will be assigned retroactively.
- 3. In order to maintain satisfactory academic progress, advance to candidacy, and earn a graduate degree, students are required to maintain at least a "B" (3.00) average in all course work attempted while enrolled in the Graduate School. Courses in which grades below "B-" (2.7) are received are not accepted for any MS or PhD degree. Students that receive such grades may repeat that course once within 24 months with the approval of the graduate program. All grades received will appear on the student's transcript and will be included in the GPA calculation. If the course is a prerequisite for other courses, the student must obtain special permission from the instructor to enroll in an advanced course in the sequence before retaking the prerequisite.

Graduate School Policy for PhD Student Vacation and Leave

The Graduate School at the University of Colorado Anschutz Medical Campus (CU Anschutz) has established the following leave policy for PhD students who receive full-support stipends from CU Anschutz PhD programs (hereafter referred to as "graduate students"). Full-time graduate students (as defined in the Graduate School Policies and Procedures) in these programs are eligible for campus holidays, vacation, sick leave, and parental leave. Tracking of leave time and requests for leave should be arranged between the student and their mentor.

Leave of Absence Policy

Leaves of Absence (LOA) are arranged with and approved by program directors with the request, then forwarded to the Graduate School for final approval. A leave of absence may be approved for a maximum of one year. Personal LOAs are reviewed and approved entirely through the program and the Graduate School; medical LOAs are managed through the Office of Case Management on the student's home campus in collaboration with the program and the Graduate School. An approved LOA pauses the student's academic record and automatically extends the time limit for completing a degree by the equivalent amount of time that the student spends on leave. Requests for LOA that exceed one (1) year may be approved with sufficient justification to the Dean of the Graduate School. Students who do not return from their approved LOA will be considered to have withdrawn from their program and will either be required to formally re-apply for admission, or, at the discretion of the program, may be re-admitted through an expedited process.

Academic Information

Academic Calendar

Please visit the website for the current academic calendar:

 $\underline{\text{https://coloradosph.cuanschutz.edu/education/calenda}}_{\underline{rs-policies}}$

ColoradoSPH Course Book

The ColoradoSPH Course Book, which provides descriptions of all approved courses at all three campuses, is available at:

https://coloradosph.cuanschutz.edu/education/courses-and-registration

Registration

Course offerings, course book, academic calendar and registration dates are available on

the website: https://coloradosph.cuanschutz.edu/education/courses-and-registration

All students of the Colorado School of Public Health register for courses through UCD Access. Students must have a CU email address to access the registration system.

https://portal.prod.cu.edu/UCDAccessFedAuthLogin.html

Dropping & Adding a Course

The drop/add period extends two weeks after the first day of the fall and spring semesters and one week after the start of the summer semester. To drop or add a class during the drop/add period, please log onto the registration portal – UCD Access – at:

https://portal.cusys.edu/UCDAccessFedAuthLogin.html

Dropping courses after the drop/add deadlines will result in o% tuition and fee reimbursement and a corresponding grade of "W" (withdrawal) will be reflected on the transcript.

Permission to register or drop a course after the add/drop period will be granted only in extenuating circumstances and requires the approval of the Assistant Dean of the Graduate School.

The drop/add deadlines can be found on the Academic Calendar at:

https://coloradosph.cuanschutz.edu/education/calendars-policies

Course Withdrawal Policy & Timeframe

If a student wishes to withdraw from a course, they should obtain a withdrawal form from the CU

Anschutz Medical Campus Registrar's office or website:

https://www.cuanschutz.edu/registrar/student-resources/forms

Withdrawal from a course is a formal discontinuation of the course after the drop/add period, and results in a grade of "W" on the student's official transcript. If attendance in a current course is discontinued without an official withdrawal, the student's transcript will reflect the grade earned for that course. Withdrawals from courses are not eligible for tuition reimbursements.

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- 100% reimbursement will be granted if a course is dropped before classes begin or during the drop/add period (see ColoradoSPH Academic Calendar for semester deadlines)
- There will be no reimbursement for withdrawal after the drop/add period and a grade of "W"

(withdrawal) will be reflected on the transcript.

Auditing Courses

The CU Anschutz Medical Campus does not allow auditing of courses. Students may register for a course for "No Credit," but must pay the full tuition and fees. Students must designate "No Credit" by the appropriate deadlines as set forth by the Registrar's Office. No Credit forms are available from the CU Anschutz Medical Campus Registrar's Office:

https://www.cuanschutz.edu/registrar/student-resources/formshttps://www.ucdenver.edu/registrar/student-resources/formshttps://www.uc

Registering for Courses on Other CU Campuses

ColoradoSPH students are able to register for UC Denver (downtown) campus courses with the UCD Access registration system, given that any prerequisite requirements are met. Registration can only be conducted during the drop/add period at the host (downtown) campus. The ColoradoSPH tuition rate will be assessed for any courses taken downtown, unless the student is enrolled in a dual degree program with the downtown campus. If the student wishes to apply a course taken at UCD downtown toward MPH program requirements, he or she must secure faculty advisor approval **prior** to taking the course. See "Electives outside ColoradoSPH" below.

Students who would like to enroll for a course on the Boulder or Colorado Springs campuses **do not** register on UCD Access. Instead, they must complete the *Intercampus Registration Form* found on the UCDenver Campus Registrar's Office at:

https://www.cuanschutz.edu/registrar/student-resources/forms

Approval from both the host and home campuses is required. After all signatures have been obtained, the completed form should be return to the CU Anschutz Medical Campus Registrar's Office for processing. Students must be registered for at least one course on their home campus in order to add a concurrent class on either the Boulder or Colorado Springs campuses.

Incomplete Coursework

In the case that a student cannot complete a course during the regular semester, the student may request an "incomplete" grade in the course, which will enable the student to complete the course during the following semester. Requests should be made using the "Request for a grade of incomplete" form, which can be found on the "Forms" page:

https://coloradosph.cuanschutz.edu/resources/for-current-students/academic-forms

Students who have been approved for an "incomplete" and need to continue the course should **not** re-register for the course on UCD Access or duplicate tuition will be charged. If an 'incomplete" grade has been approved and continued access to online materials (i.e., Canvas) is needed, please contact the Office of Student Affairs. **Students should not re-register for the course.**

Students have one year to finalize incomplete coursework and solidify their grade. If the coursework is not completed in that timeframe, a grade of "F" will automatically be applied to the student's transcript.

Transfer Credits

Graduate School rules allow students to transfer up to 12 semester credits towards a MS degree and 30 semester hours toward the PhD degree for courses taken either at another university or as a non-degree student at UCD. Courses taken at any CU campus by students enrolled in a program are not considered transfer credits.

Transfer of credit from other universities must meet the following criteria:

- 1. The course must be graduate level, i.e., offered within the degree program at the 5000-level or above.
- 2. If offered outside a degree program, (including transfer credits), the courses must be 5000- equivalent level or higher and are approved for a specific degree program.
- 3. The grade must be at least a B- for MS students and at least a B for PhD students.
- 4. The student must have at least a 3.0 GPA in our program after at least one semester in the program.
- 5. The work must have been completed within the past seven years.
- 6. The student must submit a syllabus or examples of assignments from the course to the program director demonstrating the relevancy of the content to students Epidemiology MS or PhD degree program. The onus is on the student to prove relevancy of material.
- 7. The request for transfer must be made on a form obtained from the Graduate School. The form must be completed by the student, endorsed by the advisor and the program director, and sent to the Graduate School along with an official transcript showing the course.

Courses from a Prior CU degree

CU courses taken for a prior CU graduate program can be counted towards another degree without waiving or replacing those credits with an additional course. There are limits to the number of credits that can be applied from a prior CSPH degree. For example, up to 30

credits from courses that were applied towards a Masters can be counted towards the PhD.

Foundational Public Health Knowledge Requirement

It is a requirement of the school's accreditation that all ColoradoSPH MS and PhD students are grounded in foundational public health knowledge. This is a curriculum requirement of the MS program, and a prerequisite to the PhD program. To satisfy this requirement, all MS and PhD students must complete the following courses:

- Foundations in Public Health (PUBH6600- 2 credits)
- Public Health Concepts for Non-MPH (EHOH 6601- 1 credit)
- Epidemiology (EPID 6630-3 credits)

Students with a prior MPH degree or a graduate-level degree from a CEPH-accredited institution are eligible to waive this requirement.

Epidemiology MS students who are approved to waive this requirement must replace the associated waived credits with an equal number of alternative elective credits.

MS Program Guidelines

Program Overview

The Masters program in Epidemiology is tailored for students who seek careers as data analysts, data managers, research coordinators or program managers working with collaborative teams in academic research or public health practice. The program focuses on foundational epidemiology concepts and analytic skills with an emphasis on epidemiologic methods, which, along with the practical research and programming experience provided by the thesis experience, differentiates the program from the MPH.

MS Requirements

Coursework Prerequisites

Students are required to have taken one semester of calculus (calc I) and have taken courses in biological sciences. Students should have a baccalaureate degree in a scientific field from an accredited college or university or completion of work equivalent to the baccalaureate or master's degree in a scientific field given at University of Colorado. Minimum undergraduate GPA of at least 3.0 on a 4 point scale. While not required, a previous statistics or biostatistics course with a grade of B or higher and prior exposure to statistical software are highly recommended for students entering the program.

Course Requirements

The following tables list the credit hours required to complete the MS program in Epidemiology. Students who have had some of the required (or equivalent) courses prior to admission into the program may be allowed to substitute credit hours using those courses.

Course Requirements	Credit Hours
Core Epidemiology Coursework	12 total
EPID 6626 (Research Methods)	3

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EPID 6630 (Epidemiology) EPID 6631 (Analytical Epidemiology) EPID 7631 (Advanced Epidemiology 1)	3
Topic-based Epidemiology or Research and Methods Electives	3 7 total
See lists below	,
Core Biostatistics Coursework	9 total
BIOS 6611 (Biostatistical Methods I)	3
BIOS 6612 (Biostatistical Methods II)	3
BIOS 668o (SAS Database Design and Management) OR	3
EPID 6605 Intro to R for Health Sciences AND EPID 6607 R for	
Data Management [^]	
General Public Health Coursework	3 Total
PUBH 6600 (Foundations in Public Health)	2
EHOH 6601 (Public Health Concepts for Non-MPH)	1
Additional Coursework	3 Total
CLSC 7150 or CLSC 7151 (Ethics in Research)	1
Additional Electives*	2
Thesis/ Research Paper	4 Total
EPID 6651/ EPID 6950	4
Total Semester Credit Hours	38

[^] Starting in Fall 2024 we have an alternative to the SAS data management course for those who would prefer to develop deeper skills in the R programming language. So the requirement will as of Fall provide an alternative to BIOS 6680. EPID 6605 and 6607 are both 8 week courses to make a full 16 week course, equivalent to BIOS 6680.

^{*}All ColoradoSPH courses are potential electives. Contact your Program Director if you have a question about a specific course.

Electives		7
		total
Research	and Methods Electives	
Fall	BIOS 6623 Advanced Data Analysis	3
Spring	EPID 6646 (Methods for Conducting Systematic Review and Meta-	2
	Analysis)	
Spring	EPID 7605 (Research Methods with Secondary Data Sources)	3
Spring	EPID 7632 (Advanced Epidemiology II)	3
Fall	CBHS 6620 Survey Research	3
Fall	CBHS 6622 Qualitative Research Methods	3
Spring	CBHS 6638 Advanced Qualitative Research Methods	3
Fall	CBHS 7010/BIOS 6628 Latent Variable Methods	3
Fall	BIOS 6621 (Statistical Consulting 1)	1
Spring	BIOS 6622 (Statistical Consulting 2)	1
Fall	BIOS 6629 (Applied Survival and Longitudinal Data Analysis)	3
Fall,Spring	BIOS 6640 (R for Data Science)	2
Variable	BIOS 6641 (Causal Inference)	3
Fall	BIOS 6648 (Design and Conduct of Clinical Research)	3
Fall	BIOS 668o (SAS Database Design and Management)*	3
Spring	BIOS 7719 (Information Visualization)	3

Content A	Content Area Epidemiology Electives		
Fall, Spring	EPID 6606 (Obesity and Cardiovascular Disease)	1	
Summer	EPID 6627 (Stigma, Health Inequities, and Global Health)	1	
Spring	EPID 6635 (Infectious Disease Epidemiology)	2	
Fall	EPID 66 ₃ 6 (Chronic Disease Epidemiology)	3	
Spring	EPID 6637 (Injury and Violence Epidemiology and Prevention)	2	
Fall	EPID 66 ₃ 8 (Global Cardiovascular Epidemiology)	2	
Spring	EPID 6642 (Genetics in Public Health)	2	
Fall	EPID 6644 (Maternal Child Health Epidemiology)	3	
Spring	EPID 6645 (One Health - EcoHealth - Planetary Health)	1	
Spring	EPID 6655 (Infectious Diseases Causing Chronic Diseases)	1	
Fall	EPID 6656 (Environmental Data Science for Public Health)	3	
Spring	EPID 7615 (Pharmacoepidemiology)	2-4	

MS Example Sequence

MS Example Sequence			
Year 1			
Fall	BIOS 6611 (Biostatistical Methods I) (3)		
	EPID 6630 (Introduction to Epidemiology) (3)		
	EHOH 6601 (Public Health Concepts for Non-MPH) (1) (Note: Offered in odd		
	years; in even years CLSC 7150 is an option)		
	BIOS 668o (SAS Database Design and Management) (3)		
Spring	BIOS 6612 (Biostatistical Methods II) (3)		
	EPID 6631 (Analytic Epidemiology) (3)		
	PUBH 6600 (Foundations of Public Health) (2)		
	Year 2		
Fall	EPID 6626 (Research Methods in Epidemiology) (3)		
	EPID 6638 (Global Cardiovascular Epidemiology) (2)		
	EPID 7632 (Advanced Epidemiology 1) (3)		
	BIOS 6640 (R for Data Science) (2)		
Spring	CLSC 7150 or CLSC 7151 (Ethics and Responsible Conduct of Research) (1)		
	EPID 6637 (Injury & Violence Epidemiology and Prevention) (2)		
	EPID 7605 (Research Methods with Secondary Data Sources) (3)		
Year 3			
Summer/Fall	EPID 6651 (Thesis/Research Paper) (4)		
	Final Comprehensive Exam		

Additional Elective Credits

Students may take elective course work at the Colorado School of Public Health and in other departments and campuses of the University of Colorado. Students should check with their academic advisor and program director/or as to the appropriateness of courses for elective credit.

Epidemiology Discussion Group/Journal Club

Epidemiology MS students are <u>required to attend</u> the weekly Epidemiology Discussion Group (EDG) that meets in person during the school year. In person attendance is expected, but virtual attendance may be temporarily approved for extenuating circumstances. Students in their

second year of study or higher will be required to present once per year at the discussion group to hone presentation skills and get feedback on research projects; students are highly encouraged to invite faculty to provide critical feedback and review. Once per month, a faculty run journal club will take place during the EDG time to provide students with the opportunity to critically evaluate the literature across a variety of health topics. Students will be expected to read the article prior to journal club and participate in the discussion.

Research Proposal

MS Students must produce a scholarly work that can take the form of either a publishable research paper or a formal thesis. After completing the first year of coursework, students should assemble a thesis or research paper committee. The committee should have at least three members and the majority of the members, including the chair, must be from the Epidemiology core-training faculty (see below). The committee chair must have a Primary or heavily involved Secondary appointment in the Department of Epidemiology, be tenured or tenure-track Full, Associate, or Assistant professors who hold doctoral degrees (PhD, DPhil, EdD, or PsyD) in a relevant field and have training (a degree) in Epidemiology. If the student wishes for a full, associate, or assistant professor with a professional or clinical degree to serve as a mentor or chair, it is their responsibility to petition the Graduate School for special permission. The student should arrange committee meetings at least twice a year to discuss progress and a timeline for completing the thesis or research paper and should meet with their mentor/advisor more often.

A proposal is developed based on the NIH format, outlining the background, significance, and specific aims for the proposed research. In addition, a detailed methods section should be developed to demonstrate understanding of study design issues and the analytic approach along with any preliminary findings. The student then gives a presentation of the proposal to the committee (this is not a formal Graduate School exam). When the committee approves the proposal, the members of the committee sign the proposal acceptance form. The acceptance form is forwarded to the academic affairs specialist and placed in the student's file.

Note: Students must receive approval of their committee from the Program Director at least 3 months prior to applying for admission to candidacy and scheduling their defense.

Guidance on Thesis Projects

Epidemiology is a vast and varied field, and students may find projects for their thesis that delve into less traditional topics and methods. The following points can be used to guide the development of the thesis:

- The general guidance on the project scope is that a thesis generally includes one aim/publishable unit. The thesis is a scholarly work that represents an original and independent investigation into an epidemiologic topic. The topic and scope must be approved by your committee. So, the committee is the judge and jury on the appropriateness of the project scope and topic.
- The committee composition rules make the committee, by definition, epidemiology centric in terms of expertise and background. With at least three members, the majority of the members, including the chair, must be from the Epidemiology core-training faculty. The chair should be a faculty who holds a Primary or heavily involved Secondary appointment in the Department of Epidemiology" with epi training (an epi degree). Hence, a good strategy for students who incorporate elements, topics or methods that are outside of the traditional epidemiology framework is to ensure that the core of the project demonstrates epidemiology fundamentals.

Regardless of the topic, the student will be expected to demonstrate their command of epidemiology principles and theory in the framing of the project, the questions asked, the digestion and implications of his work for population health, etc.

Application for Admission to Candidacy

When nearing completion of their thesis project, students must complete the application for admission to candidacy for the MS degree. The student obtains signatures from the mentor/advisor of the MS committee. The student then forwards the form to the Program Director for verification of the courses listed that are to be applied towards the degree and signature. The student then submits the form to the Academic Affairs Specialist at least two weeks in advance, and by the Graduate School deadline for that term, whichever is earlier, before scheduling the final exam. Once all signatures have been obtained the Academic Affairs Specialist will submit the form to the Graduate School at least two weeks prior to the exam or by the Graduate School deadline for that term, whichever is earlier. The required form can be obtained from the Graduate School website:

https://graduateschool.cuanschutz.edu/forms-resources/resources

In addition to the Application for Admission to Candidacy, students must also submit an application for graduation through the UCD Access student portal before the posted deadline for the graduation semester.

Choosing a Research Paper or Thesis Format

MS Degree Final Examination

All candidates for the MS degree are required to take a final examination after all other requirements for the degree have been completed and approval for graduation has been granted. The final examination is a presentation and defense of the thesis or research paper, as well as oral examination by the committee.

The examination committee will conduct the final examination orally. The defense consists of a seminar of 40-50 minutes, is generally open to the public unless otherwise specified, and is followed by an oral examination by the committee. All members of the committee must be present for the examination. One member, but not the chairperson or the student, may participate by interactive video. Below is a list of the possible outcomes:

Pass – You must receive the affirmative votes of the majority of the members of your committee in order to pass.

Pass with conditions – The committee may feel that although you have passed the examination you should complete additional work on the thesis. These conditions will be

specified and must be satisfied within 60 days of the defense. Failure to satisfy these conditions will result in failure of the examination.

Fail – If you fail the examination, per Graduate School rules you may be subject to immediate dismissal from the program. At the program's discretion, you may be allowed to retake the examination once. The retake will be in a format designated by the committee and must be completed by the end of the next academic semester, excluding the summer term. It is important to note that students will be required to meet registration and enrollment requirements for the semester in which they re-take the examination.

Scheduling the Final Examination

Students must submit the Exam Request form. Students must also obtain the Program Director's signature on the form. Students then submit the form to the Academic Affairs Specialist *at least two weeks* before the exam date. The Academic Affairs Specialist will submit the form to the Graduate School *at least two weeks* prior to the exam. The Exam Request form can be found on the Graduate School website:

https://graduateschool.ucdenver.edu/forms-resources/resources

Graduation

Students must apply for a diploma for their intended semester of graduation by submitting an "Intent to Graduate" form through the UCD Access student portal by the specified deadline for the graduation term.

Ceremonies

A campus-wide commencement ceremony is held once a year in May on the CU Anschutz Medical Campus. In addition, the Graduate School and ColoradoSPH offer separate convocation ceremonies for their graduates. All graduates for that academic year, or the previous August or December, are invited to attend the campus-wide, Graduate School, and ColoradoSPH convocation ceremonies The graduation ceremony and Graduate School graduation ceremonies are usually held on the last Thursday and Friday in May, respectively.

Official regalia must be worn to participate in these ceremonies. Additional details will be posted on the website and emailed to students prior to the event.

Time Limit

Master's students, whether enrolled full-time or part-time, have seven (7) calendar years from matriculation (the semester of formal admission to the Graduate School) to complete all degree requirements, including the filing of the thesis with the Graduate School, if the program requires a thesis. If a student leaves the program (i.e. becomes discontinued through formal withdrawal or non-enrollment), the time spent away does not count toward the time limit if the student is readmitted at a later date. Students who fail to complete the degree in this seven (7) year period are subject to termination from the Graduate School upon the recommendation of the Program Director and concurrence of the Dean. For a student to continue beyond the prescribed time limit, the Program Director must petition the Dean for an extension and include 1) reasons why the program faculty believes the student should be allowed to continue in the program and 2) an

anticipated timeline for completion of the degree. Normally, extensions for time to degree are for one year or less, but under rare circumstances, a second extension may be requested. The Extension of Time Limit Form is posted on the Graduate School website. Approved Leaves of Absence automatically extend the time limit for earning a degree by the equivalent amount of time that the student is on leave.

Departmental Copy of Thesis or Research Paper

The program requests that a professionally bound or electronic copy of the thesis or research paper be provided to the department.

PhD Program Guidelines

Program Overview

The PhD program in Epidemiology trains highly skilled individuals in epidemiologic research and its application to population health science to prepare graduates for research and teaching careers. The curriculum includes training in advanced epidemiologic methods for clinical, observational and community-based research including study design, statistical analysis, biological principles and disease etiology to meet the rigors of the scientific community. The program's etiologic orientation is based on the premise that knowledge of genetic, behavioral, environmental, and physiologic factors contribute to understanding the underlying causes of complex human diseases needed to develop effective preventive measures.

PhD Requirements

Coursework Prerequisites

Students are required to have taken one semester of calculus with a grade of B or higher, a previous biostatistics course with a grade of B or higher, prior coursework or experience with statistical software, (e.g. SAS, R, etc) and prior coursework in biological sciences prior to entrance in the program. All prerequisite coursework must be completed at or above the undergraduate level. Prospective students must also have a Master's degree or equivalent work experience. Students without sufficient epidemiology, public health or biological training may be accepted into the program contingent upon the completion of specified courses. It is a requirement of the school's accreditation that PhD students are grounded in foundational public health knowledge. To satisfy this requirement, all PhD students must complete the following courses:

- Foundations in Public Health (PUBH6600- 2 credits)
- Public Health Concepts for Non-MPH (EHOH 6601- 1 credit)
- Epidemiology (EPID 6630- 3 credits)

Students with a prior MPH degree or a graduate-level degree from a CEPH-accredited institution may be eligible to waive this requirement. These students must submit a requirement waiver request form to the Office of Academic affairs, documenting the student's eligibility to waive this requirement. Documentation of broad public health background is required. See "Foundational Public Health Knowledge Requirement" in this handbook.

Course Requirements

The following table lists the credit hours required to complete the PhD program. If the above-described pre-requisites are not met, they will need to be completed in addition to the required coursework for the PhD.

Course Requirements	Credit Hours
Core Epidemiology Coursework	6 total
EPID 7631 (Advanced Epidemiology 1)	3
EPID 7632 (Advanced Epidemiology 2)	3
Core Biostatistics Coursework	6 total
BIOS 6611 (Biostatistical Methods I)	3
BIOS 6612 (Biostatistical Methods II)	3
Research Methods Coursework	13 total
EPID 7605 (Research Methods with Secondary Datasets)	3
EPID 7911 (Field Methods)	3
EPID 7912 (Developing a Research Grant)	3
Analytic Methods in Epidemiology*	4
Additional Coursework	13 total
CLSC 7150 or CLSC 7151 (Ethics in Research)	1
Biomedical Sciences**	6
Electives	6
Dissertation	30 total
EPID 8990	30
Total Semester Credit Hours biostatistics	68

^{*}A minimum of 4 credits of advanced analytic coursework in biostatistics or epidemiologic methods from the ColoradoSPH

PhD Example Sequence

Year 1		
Fall	BIOS 6611 (Biostatistical Methods I) (3)	
	EPID 7631 (Advanced Epidemiology 1) (3)	
	Elective	
Spring	BIOS 6612 (Biostatistical Methods II) (3)	
	EPID 7605 (Research Methods in with Secondary Data Sets) (3)	
	EPID 7632 (Advanced Epidemiology 2) (3)	
	Preliminary Examination	
	Year 2	
Fall	EPID 7911 (Epidemiologic Field Methods)	
	Analytic Methods in Epidemiology	
	Elective	
Spring	CLSC 7150 or CLSC 7151 (Ethics and Responsible Conduct of Research) (1)	
	Analytic Methods in Epidemiology	
	EPID 7911 (Epidemiologic Field Methods)	
	Teaching Assistant Requirement	
Year 3		

^{**}A minimum of 6 credits of basic science coursework at the graduate level related to the student's thesis topic.

Fall	EPID 7912 (Developing a Research Grant) (3) Biomedical Minor
Spring	EPID 8990 (Dissertation Credits) Biomedical Minor
	Comprehensive Examination
Year 4	
Fall	EPID 8990 (Dissertation Credits)
Spring	EPID 8990 (Dissertation Credits)
Year 5	
Fall	EPID 8990 (Dissertation Credits)
Spring	EPID 8990 (Dissertation Credits)
	Final Defense

Electives

Students may take elective course work at the Colorado School of Public Health and in other departments and campuses of the University of Colorado. Students should receive approval from their academic advisor and program director as to the appropriateness of courses for elective credit.

Epidemiology Discussion Group/Journal Club

Epidemiology PhD students are required to attend the weekly Epidemiology Discussion Group (EDG) that meets in person during the school year. In person attendance is expected, but virtual attendance may be temporarily approved for extenuating circumstances. Students in their second year of study or higher will be required to present once per year at the discussion group to hone presentation skills and get feedback on research projects; students are highly encouraged to invite faculty to provide critical feedback and review. Once per month, a faculty run journal club will take place during the EDG time to provide students with the opportunity to critically evaluate the literature across a variety of health topics. Students will be expected to read the article prior to journal club and participate in the discussion.

Field Methods Project(s)

This course is intended to give PhD students the opportunity to work closely with faculty on current epidemiologic projects to develop skills in the operational aspects of field research. Such skills include proposal writing, budget development, staff hiring and training, protocol and instrument development and implementation, quality control procedures, data collection and management, community liaison and report writing. The project may be for one or more semesters. Students will register for 1, 2, or 3 credits with a total of 3 credits required for the PhD degree. Registration need not be continuous. Once you have completed a project with one faculty member, the program encourages students to work with a different faculty member on the next project. It is the student's responsibility to establish an educational contract for specific learning objectives and products for the project with the project mentor director before registering for course credits. The student will carry out the project in collaboration with the project mentor and the project mentor will assign the course grade.

Please note: It is not possible to receive course credit <u>and</u> money for the same project. Thus, persons employed on a project have to use their own time and conduct a project they would not otherwise complete for their employer.

Preliminary Examination

Acceptance of a graduate student into a program of study leading to the doctoral degree is not implied by admission to the Graduate School but occurs upon successful completion of the preliminary examination. Students must take a written preliminary examination at the end of Year 1 in the program. The exam covers material from EPID 7605, 7631 and 7632, and BIOS 6611 and 6612. This examination must be passed for the student to continue in the program. A student who does not pass all portions of the exam after two tries is no longer considered to be in good standing and cannot continue in the doctoral program. The student may apply to transfer to the Epidemiology MS program or MPH program (with approval from the Director of the program they are transferring into and assuming the student does not already hold an MS or MPH degree in Epidemiology) and complete all remaining requirements for those degrees, but the student is no longer eligible for the funding support in the form of an RA or GA that covers full tuition, insurance and a stipend, that they received as a doctoral student. Hourly project-based funding may still be available. If the student does not want to, or cannot transfer into one of the Masters programs, the student will be dismissed from the doctoral program. This is handled by both the Associate Dean of Student and Academic Affairs and the Dean of the Graduate School who conduct interviews with all involved parties and issue a letter to the student.

Teaching Requirement

All epidemiology PhD students are required to be a teaching assistant (TA) for at least two *core epidemiology program courses* within the Department of Epidemiology to meet the requirements of the degree program. Students may request to TA specific courses to meet their requirement. However, assignments are at the discretion of the TA committee and courses must be approved by the Epidemiology Department Curriculum Committee as meeting educational requirements for the TAship. Students must take the online TA training course prior to being a TA: https://ucdenver.instructure.com/courses/528225. Students may choose to TA additional courses beyond the requirement for pay. Students with full time RAships may take on paid TAships for up to 5 hours. Note: it is the responsibility of the student to communicate with their RA mentor about TAing responsibilities and to make sure that the TAship does not infringe on RAship obligations. As a program requirement, the TAship is outside of the RAship hours, similar to coursework.

Biomedical Science Requirement

All doctoral students will be expected to develop knowledge of at least one field of human biology or medicine. Such fields include, but are not limited to: human genetics, biophysics, medical physiology, clinical pathology, anatomy, human ecology, and health demography. These courses can be taken at the School of Medicine, School of Pharmacy, or in other basic science doctoral programs at CU Denver. Students may also take courses at the Downtown or Boulder campuses, or any accredited university to meet the requirement. The purpose of this work is to provide a broader educational experience and to help prepare students for the comprehensive examination. The work is intended to help the student develop the ability to formulate cogent research questions, and to communicate and interpret quantitative results to health professionals. Examples of biomedical science electives can be found at the end of the handbook.

Guidance on Dissertation Projects

Epidemiology is a vast and varied field, and students may find projects for their dissertation that delve into less traditional topics and methods. The following points can be used to guide the

development of the dissertation:

- The general guidance on the project scope is that a dissertation generally includes three Aims/publishable units. As stated in this handbook, a dissertation is an "original investigation," shows "mature scholarship," and "must be written and approved by your examining committee." So, the committee is the judge and jury on project scope and topic.
- The committee composition rules make the committee, by definition, epidemiology centric in terms of expertise and background. Hence, a good strategy for students who incorporate elements, topics or methods that are outside of the traditional epidemiology framework is to ensure at least one of the aims demonstrates epidemiology fundamentals, while others can be farther afield. Regardless, the student will be expected to demonstrate their command of epidemiology principles and theory in the framing of the project, the questions asked, the digestion and implications of his work for population health, etc.
- In addition to the committee's influence, much of the project will be shaped during the Developing a Research Grant course (EPID 7912) which is a required course with documented expectations. The student will need to begin preparing for the course with their mentor over the summer prior to taking the course and will need to be able to explain the epidemiology/public health relevance of their project to their peers, course instructors, and faculty reviewers.

Comprehensive Examination and Dissertation Defense Committee

Students select at least five members to serve as an examination committee for the Comprehensive Examination and Dissertation Defense. This committee is required to meet at least twice a year.

Note: Students must receive approval of their committee from the Program Director at least 3 months prior to scheduling the comprehensive examination. All members must have, or be eligible for, a Graduate School faculty appointment. Please see the Epidemiology Core Program Faculty Policy at the end of this handbook.

For any committee member who does not yet have a Graduate School faculty appointment, the student must forward a copy of the committee member's current curriculum vitae (CV) to the Academic Affairs Specialist who will process the appointment. The student's main technical advisor/mentor may not be the Chair of the examining committee. The primary mentor, comentor (if applicable) and committee chair must be tenured or tenure-track Full, Associate, or Assistant Professors who hold doctorate degrees (PhD, DPhil, DSc, EdD, or PsyD). In addition, the committee, as a whole, must meet the following minimum criteria:

- Two members of the committee must be part of the Epidemiology Core Program
 Faculty. One of these two members will become the Chair of the dissertation
 committee. The other will serve as the mentor for the project. Both faculty
 members serve as the student's academic advisors for the duration of the
 dissertation project.
- 2. One member of the committee must be from the Department of Biostatistics and Informatics.
- 3. One member must be from outside the School. An outside member is defined as a person without a primary faculty appointment at the Colorado School of

- Public Health. This could include persons with no appointment in the School or with either a clinical or secondary appointment in the School.
- 4. The remaining slot on the committee can be filled by anyone eligible to serve as a member of a PhD thesis committee, as defined by the Graduate School here: https://www1.ucdenver.edu/docs/librariesprovider138/denver-anschutz-graduate-school/resources/graduate-faculty-quick-reference-table.pdf?sfvrsn=ef0622b9_2

Application for Admission to Candidacy

Students must complete the application for admission to candidacy for the PhD degree. The student obtains signatures from the Advisor and Chair of the PhD committee. The student then forwards the form to the Program Director for verification of the courses listed that are to be applied towards the degree and signature. The student then submits the form to the Academic Affairs Specialist at least two weeks in advance, and by the Graduate School deadline for that term, whichever is earlier, before scheduling the comprehensive exam. Once the student obtains all signatures the Academic Affairs Specialist will submit the form to the Graduate School at least two weeks prior to the exam or by the Graduate School deadline for that term, whichever is earlier. The required form can be found on the Graduate School website:

https://graduateschool.cuanschutz.edu/forms-resources/resources (Application for Candidacy Form)

Scheduling the Comprehensive Exam

The Exam Request form is required to schedule the comprehensive exam. Students must obtain the Program Director's signature on the form. Students then submit the form to the Academic Affairs Specialist <u>at least two weeks</u> before the exam date. The Academic Affairs Specialist will submit the form to the Graduate School <u>at least two weeks</u> prior to the comprehensive exam date. The Exam Request form can be found on the Graduate School website.

https://graduateschool.ucdenver.edu/forms-resources/resources (Exam request form)

Comprehensive Examination

The Dissertation Committee will administer oral and written comprehensive examinations when a student has chosen a dissertation topic and is ready to initiate the project. *The comprehensive exams must be taken no later than the end of the third year, except under extenuating circumstances*. The written exam will consist of a literature review and research proposal. The oral examination consists of a presentation and discussion of the student's dissertation proposal. In addition, the student should demonstrate in-depth knowledge of the biological and methodological issues pertinent to the student's project. The literature review and dissertation proposal should be submitted in writing to the dissertation committee at least 3-5 weeks before the oral exam. The literature review and proposal should be written in NIH research proposal format outlining the background, significance and specific aims for the proposed research. In addition, a detailed methods section should demonstrate an understanding of study design issues and the analytic approach along with any preliminary findings.

NIH page restrictions do not apply. When both the written and oral parts of the comprehensive examination have been passed, and the other Graduate School requirements are complete, students can proceed with their dissertation. The required forms can be obtained from the

Graduate School website:

https://graduateschool.cuanschutz.edu/forms-resources/resources (Thesis Approval Form)

Below is a list of the possible outcomes for your comprehensive exam:

Pass- you receive the affirmative votes of the majority of the members of your committee in order to pass.

Pass with conditions- the committee may feel that although you have passed the examination you should complete additional work on the thesis. These conditions will be specified and must be satisfied within 4 months of the exam.

Fail- if you fail the examination, per Graduate School rules you may be subject to immediate dismissal from the program. At the program's discretion, you may be allowed to retake the examination once. The retake will be in a format designated by the committee and must be completed within 12 months. It is important to note that students will be required to meet registration and enrollment requirements for the semester in which they re-take the examination.

Continuous Registration Requirement- Post Comps

Following successful completion of the Graduate School comprehensive exam, students must register for at least 5 dissertation credits, EPID 8990, each semester (excluding the summer semester). If the dissertation defense is during the summer semester, the student must register for 5 dissertation credits for that semester. A maximum of 10 dissertation credits can be taken in any semester, unless approval is received from the Assistant Dean of the Graduate School. Only 10 of the dissertation credits taken prior to the comprehensive examination will count towards the required 30. At least 20 dissertation credits, out of the 30, must be taken after the comprehensive exam.

Note: Once a student has completed 30 dissertation credits, then the student is only required to register for one dissertation credit for fall and spring semester. Summer registration is only required if the student plans to do their examination during summer semester.

Post-Comp Committee Meetings

Students are required to meet with their Dissertation Committee at least twice each year. Students must submit meeting minutes/notes to the academic affairs specialist to be kept in their file.

Dissertation

A dissertation based upon original investigation and showing mature scholarship must be written and approved by your examining committee.

The dissertation may take a variety of forms with generally three separate publishable scholarly works or aims but must adhere to format guidelines. The written dissertation document must be submitted at least 3 weeks prior to the final examination and formally approved by the dissertation committee before the final examination. All Graduate School guidelines and

specifications must be followed as outlined on the Graduate School website:

<u>https://graduateschool.cuanschutz.edu/forms-resources/resources</u> (Format Guide for Theses and Dissertations)

The Exam Request form is required to schedule the dissertation defense. Students must obtain the Chair and Program Director's signatures on the form. Students then submit the form to the Academic Affairs Specialist <u>at least two weeks</u> before the exam date. The Academic Affairs Specialist will submit the form to the Graduate School <u>at least two weeks</u> prior to the dissertation defense date. The Exam Request form can be found on the Graduate School website:

https://graduateschool.cuanschutz.edu/forms-resources/resources (Exam request form)

Defense

The examination committee will conduct a final examination of the dissertation and related topics orally. The defense consists of a 40–50-minute seminar, open to the public, followed by an oral examination by the committee. All members of the committee must be present for the examination. One member, but not the chairperson or the student, may participate by interactive video. Below is a list of the possible outcomes for your defense:

Pass – You receive the affirmative votes of the majority of the members of your committee in order to pass.

Pass with conditions – The committee may feel that although you have passed the examination you should complete additional coursework on the thesis. These conditions will be specified and must be satisfied within 60 days of the defense.

Fail – If a student fails the examination, s/he may not continue in the program.

Several forms will be provided to you by the Graduate School for your Defense including the Thesis Approval Form. After you have incorporated any additional edits requested by your committee at your defense, a final version of your dissertation will need to be submitted through ProQuest.

A helpful video on how to format and submit your dissertation is provided here.

Graduation

Students must apply for a diploma for their intended semester of graduation by submitting an "Intent to Graduate" form through the UCD Access student portal by the specified graduation term deadline.

Ceremonies

A campus-wide commencement ceremony is held once a year in May on the CU Anschutz Medical Campus. In addition, the Graduate School and ColoradoSPH offer separate convocation ceremonies for their graduates. All graduates for that academic year, or the previous August or December, are invited to attend the campus-wide, Graduate School, and ColoradoSPH convocation ceremonies The graduation ceremony and Graduate School graduation ceremonies are usually held on the last Thursday and Friday in May, respectively.

Official regalia must be worn to participate in these ceremonies. Additional details will be posted on the website and emailed to students prior to the event.

Time Limit

Doctoral students, whether enrolled full-time or part-time, must complete all degree requirements within eight (8) calendar years of matriculation. Students who fail to complete the degree in this eight (8) year period are subject to termination from the Graduate School upon the recommendation of the Program Director and concurrence of the Dean. For a student to continue beyond the prescribed time limit, the Program Director must petition the Graduate School Dean for an extension and include 1) reasons why the program faculty believes the student should be allowed to continue in the Program and 2) an anticipated timeline for completion of the degree. Extensions for time to degree are normally issued for one year or less, but under rare circumstances, a second extension may be granted. The Extension of Time Limit Form is posted on the Graduate School website. Approved Leaves of Absence automatically extend the time limit for earning a degree by the equivalent amount of time that the student is on leave.

Departmental Copy of Dissertation

The Program requests that a bound hard copy or electronic copy of the dissertation be provided for the department.

Examples of Biomedical Science Courses

These are just a few examples of courses which meet the biomedical minor requirement. Please refer to the current UCD AMC Graduate School course book for more detailed course descriptions and specific information regarding prerequisites and the semester the course is being offered. The current UCD AMC Graduate School course book may be found at:

https://www.cuanschutz.edu/registrar/catalog

Note: Some of the course descriptions include comments from Epidemiology doctoral students who have taken the course. Look for an * for their evaluation.

CANB 7600 - Molecular Mechanisms of Cancer

This is an advanced course that will focus on mechanisms of cancer initiation and progression. The course will include didactic presentations, primary literature analysis and workshops. The course is open to all graduate students but requires some prior knowledge of Cancer Biology.

CANB 7620 - Histophysiology

Discussions of cell interactions, tissue physiology, and renewal based upon the histologic cell types and structures present. Where pertinent, pathologic alterations will be introduced to facilitate identification of the important normal functions/structures.

HMGP 7600 - Survey of Human Genetics

Survey of human genetics, including Mendelian and other types of inheritance, chromosomes and cytogenetics, molecular and biochemical basis of genetic disease, quantitative genetics and gene mapping, developmental and cancer genetics, clinical genetics, and genetic screening and prenatal diagnosis.

*Epidemiology doctoral student evaluation: HMGP 7600 is a great course, which covers many aspects of human genetics. It is very interesting and helpful to any student who is interested in genetic epidemiology. However, it assumes a fairly high background level of genetics knowledge. This course more or less assumes that you have background knowledge of at least one semester of an undergraduate course specifically in genetic; Recommended - Lots of information, good overview of the field. Many instructors lecture; It was far more challenging and required significantly more background then traditional "survey" courses. Should probably be considered a preliminary exam prep course for HMGP students. However it was a beneficial course and it was possible for someone with minimal background to pass and learn a good deal of genetics.

IDPT 6006 – Obesity and Cardiovascular Disease

The course will cover how obesity relates to cardiovascular disease including basic and clinical mechanisms on the pathophysiology of vascular biology, insulin resistance, risk factors, and outcomes, and how therapeutic interventions modify cardiovascular disease risk.

BSBT 7646 – Tissue Biology and Disease Mechanisms

This course provides an overview of organ systems and disease through 1) a survey of the major systems, including the cellular and molecular mechanisms underlying their function and repair, integrated with 2) common diseases, current therapies, and their mechanistic basis.

IMMU 7662 - Immunology

This course covers the basic principles of the immune system. Included are discussions on (i) the innate and adaptive immune responses, (ii) the molecular and cellular basis of immune specificity and (ii) aspects of clinical immunology.

IPHY 6601 - Human Physiology

This course in Physiology is designed to provide an understanding of the functions of cells, tissues, and organs in the human body and the overall integration of organ functions in the body as a whole.

IPHY 7840 - Advanced Topics in Cell Signaling

Students select topics of interest in the area of cell signaling and receive one-on-one instruction from expert faculty. Each one-credit topic will be taught for 5 weeks. Course work will include reading and discussing papers as well as practical exercises

MICB 7701 - Molecular Virology and Pathogenesis

Topics in this course include viral structure and genome organization, replication and expression of viral genomes, mechanism of action of tumor viruses, molecular aspects of virus-host cell interactions, animal models of infectious diseases and pathogenesis of human viruses.

MICB 7703 - Molecular Mechanisms of Bacterial Disease

The course focuses on molecular processes that bacteria utilize to cause disease in humans. The course content will use specific examples from pathogenic bacteria to illustrate common virulence mechanisms utilized to initiate, maintain and survive interactions with host cells

NRSC 7501 – Introduction to Neuroscience

Introduction to study of the nervous system from the level of the brain to an understanding of how neurons are specialized for communication and information processing.

PHSC 7310 - Fundamentals of Pharmaceutical Sciences

Core course explores key aspects of Pharmaceutical Sciences. Major themes will focus on macromolecular interactions, pharmaceutics, pharmacokinetics, pharmacodynamics, apoptosis, signal transduction and immunology. Critical thinking and problem solving skills will be emphasized via lectures, discussions, and computer-based data analyses.

PHSC 7405 – Hands-On Metabolomics Workshop

A 4-day intensive hands-on workshop that provides a comprehensive view of metabolomics. Participants will learn introductory metabolomics science and applicable protocols/technologies. Appropriate for individuals with little to no experience in mass spectrometry and who will use this technology in their research.

TXCL 7322 — Molecular and Target Organ Toxicology

The course is designed to provide a foundation in molecular mechanisms of toxicity. Biochemical mechanisms underlying toxicity will be analyzed and integrated with discussions of reactive metabolites, oxidative stress, signal transduction, cell death and organ specific toxicity.

TXCL 7323 - Environmental and Target Organ Toxicology

The course is designed to provide a fundamental understanding of environmental-related toxicants (e.g. solvents, pesticides, metals, radiation) with emphases on the molecular mechanisms underlying their organ specific toxicity and on risk assessment.

TXCL 7564 - Environmental Risk assessment and Applied Toxicology

Provides students with experience in risk assessment, environmental toxicology for public health and regulatory decision making. Topics include comprehensive human health risk assessments, baseline/probabilistic statistics, ecological risk assessment activities associated with emergency action, medical monitoring, and role toxicology plays in the courtroom.

TXCL 7330 - Development of Drugs and Biologics

A survey course designed to introduce students to pharmacokinetic and pharmacodynamics principals used in drug research and development by faculty of the Skaggs School of Pharmacy, Department of Pharmaceutical Sciences. The Phoenix Winnonlin Computer software, is used to complete homework.

Epidemiology Core Program Faculty Policy

To serve as the primary mentor or chair for an Epidemiology MS or PhD thesis, a faculty member must be part of the Epidemiology Core Program Faculty *and* have a "Regular" Appointment in the Graduate School where the primary is "EPID". Other Regular series faculty may be eligible pending a discussion with the Program Director and/or Graduate School. Some Core Faculty may not have an appointment in the Graduate School. Discuss with your program director if your desired chair or mentor needs to be added.

Current Graduate School appointments and types can be found here: https://gs.ucdenver.edu/graduate-faculty-directory/

A directory of primary and secondary EPID faculty can be found here: https://coloradosph.cuanschutz.edu/education/departments/epidemiology/directory

This quick reference table describes Graduate School qualification for each member of an MS or PhD thesis committee:

 $\underline{https://graduateschool.cuanschutz.edu/docs/librariesprovider 138/den ver-anschutz-graduateschool/resources/gs-policies-and-procedures.pdf}$