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# PhD Program Guidelines: Epidemiology

Department of Epidemiology

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Dear PhD Students and Faculty,

Welcome to the Department of Epidemiology! We are pleased to share with you the PhD student guidelines. Please note we update these guidelines on a regular basis prior to the start of the new academic year.

A quick overview of the information presented in this guide:

- **Section I** provides an introduction to the goals, structure, and administration of the PhD program in the Department of Epidemiology.
- **Section II** addresses the basics of admissions, registration and covering the costs of a PhD.
- **Section III** provides a roadmap to help doctoral students optimize their educational experience through engagement with faculty and peers in the department.
- **Section IV** covers the program requirements. Its four subsections address the following:
  - overview of the program
  - training and examination components, including courses and qualifying exams
  - teaching and research experiences
  - the dissertation process
  - administrative details including waivers, exemptions, and the honor code
- **Section V** describes faculty mentoring of students, procedures to monitor students' progress through the PhD program, and resources for issues students may encounter during their time in the program.

It is our sincere hope that these guidelines will enable our students to have an optimal educational experience in the Department of Epidemiology. We welcome and encourage any suggestions for their improvement.

Our very best wishes,

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## Section I- Introduction

### 1. The goal of training in a PhD program in Epidemiology

The overarching goal of the Columbia University PhD program in epidemiology is to train students for careers as leaders in research and training in academic, not-for-profit, clinical, governmental and private sector settings. Our graduates have achieved prominence as faculty in academic institutions, in national and local public health institutions, as clinical epidemiologists, researchers in national and international NGOs, and in industry.

### 2. The PhD or the DrPH

The Department of Epidemiology offers doctoral training through two different degrees, the Doctor of Philosophy (PhD) and the Doctor of Public Health (DrPH). Either degree can be a route to a career in academic public health, clinical epidemiology or public health leadership but the PhD is oriented towards preparing students specifically for academic research careers in epidemiology, while the DrPH provides experienced professionals in public health or a clinical field with the skills and competencies to excel as effective leaders grounded in evidence based, epidemiologic research. The PhD offers a rigorous methods sequence of advanced courses designed to prepare doctoral students for a career in which they develop, implement, and disseminate research in their fields. Online here we have further detailed the distinctions between the DrPH and PhD. This document includes guidelines for the PhD program; guidelines for the DrPH are described in a separate [document](#).

### 3. Competencies for the PhD

By the time students receive their PhD degree, they will be able to:

- identify and address critical public health issues that merit epidemiologic investigation
- design, implement, communicate and publish independent, scholarly research that advances knowledge about the causes, prevention, outcome and alleviation of human disease
- apply principles of causal inference to epidemiologic data
- apply evidence-based principles and the scientific knowledge base to critical evaluation and decision- making in public health
- train graduate students or health professionals in academic and other settings to understand, perform and analyze epidemiologic studies

#### 4. Administration

The PhD program is led by the Epidemiology PhD Steering Committee under the auspices of Columbia's Graduate School of Arts and Sciences (GSAS) and administered by the Mailman School of Public Health. GSAS rules are followed for tuition payment, residence requirements, and preparation and defense of the dissertation.

#### 5. Departmental structures administering the PhD program

The PhD Steering Committee is responsible for all aspects of the PhD program and, in cooperation with the Department Chair, the Vice Chair for Education, and the Director of the PhD Program (called the Director of Graduate Studies in the GSAS), sets policy, reviews student progress, and evaluates program success. The PhD Steering Committee acts on behalf of, and with agreement of, the faculty. It consults with students regarding policy issues. In collaboration with the departmental Curriculum Committee, it reviews and agrees on required coursework. Courses themselves are reviewed and evaluated by both the departmental Curriculum Committee and the MSPH Curriculum Committee.

Though the overall policy is determined by the PhD Steering Committee, there are three subcommittees of the PhD Steering Committee: the Admissions Committee, the Methods Examination Committee, and the Foundation Essay Committee. These three have explicit functions. The Admissions Committee reviews applications and offers admission to the PhD program. The Methods Examination Committee sets the exam protocol and plans and grades the Methods Examination annually. The Foundation Essay Committee sets the exam protocol and plans and oversees the grading of the Foundation Essay.

The PhD Steering Committee itself is composed of the Director of the PhD Program, Deputy Director of the PhD Doctoral Program, the Chairs of the three subcommittees, the Vice Chair for Education, the Chair of the Curriculum Committee, a representative from a funded training program and two at-large committee members as well as two student representatives. The committee and subcommittees receive administrative support from the Director for Academic Programs.

## Section II- Admission, Registration, and Funding

### 1. Admission to the PhD Program in Epidemiology

#### *Timeline*

Applications for admission to the PhD program are available online through [SOPHAS](http://sophas.org) (sophas.org) and follow the SOPHAS requirements and deadlines. Applications are reviewed in January and February and applicants are notified of the committee's decision, along with funding decisions, by early March.

#### *Prior degree requirements*

All students must have received a master's degree as specified below before matriculating in the PhD program. Students enrolled in a master's program at the time of application must provide evidence of completion prior to entry. Individuals who have earned a doctoral degree in a program that does not confer a master's degree (e.g., MD, JD) are also eligible, although prior experience or training in epidemiology is expected as outlined in the section for [Sequence of Required and Recommended Courses](#). An exceptional student with an unrelated master's degree may be admitted directly to the PhD program contingent on initial successful completion of the prerequisites listed under the section for [Expectations for prior training, skills and knowledge](#).

#### *Recommended background*

Successful applicants should demonstrate commitment to public health, a clear understanding of what epidemiology entails, and research interests and career goals appropriate to a career linked to epidemiology. In their Statement of Purpose, an essential component of their admissions submission, applicants should explain how their background experience qualifies them for admission to the program. The successful applicant will have a strong academic record, particularly in epidemiology and biostatistics, relevant work or trainee experience. This must be supported by persuasive recommendations from their academic or work supervisors and mentors, documenting their capacity to undertake the challenging courses and research engagement required for independent thinking and leadership in research. Coursework in mathematics (e.g., algebra, calculus) and/or statistics and prior courses in epidemiology is required. A strong background in the natural and/or social sciences is highly recommended. The admissions committee carefully reviews the statement of purpose and the required writing sample to determine whether the applicant has the ability to write clearly and persuasively.

## 2. PhD registration and tuition

The PhD is considered a full-time, in-person program that requires continuous registration and the completion of six Residence Units (RUs) prior to undertaking the qualifying exams. Tuition is calculated on a flat-fee basis, and not by individual course. Students entering with a master's or other terminal degree (e.g., MD) are eligible for "advanced standing" which reduces the number of RUs required to four. Advanced standing is determined after they have completed one semester of coursework in the PhD program. Students may register for a full or a half RU. The four RUs may be accumulated as four full RUs, eight half RUs, or a combination of both. Students registered for a full RU are considered full-time. While the RU is not itself a course, it is assigned a course ID number for registration purposes. PhD students registered for a full RU can take as many courses as they want; students registered for a half RU may enroll in three courses per semester. Matriculation & Facilities (M&F) registration entitles the student to use university facilities but not to take courses.

After completion of all [required courses](#) and [teaching experience](#), students maintain continuous registration through Matriculation and Facilities (M&F), according to the following guidelines:

- Students who are defending a dissertation must register for M&F unless they have already distributed the dissertation.
- Students may register for part-time M&F if they live more than 200 miles from the University, if they do not need to be full-time certified by the Department and if they do not require Student Health Service or Health Insurance.

After successfully passing the Methods Exam and the Foundation Essay, students are awarded the MPhil degree.

## 3. Funding

Upon acceptance to the PhD program, your [offer](#) provides 5 years of guaranteed total annual support, in addition to coverage of [tuition and fees, health insurance and a benefits](#) package provided to all PhD students at Columbia University (<https://gsas.columbia.edu/graduate-life/student-life-well-being>). You will receive this total annual support as long as you remain in good standing, with timely and satisfactory progress towards completion of your doctoral studies. For Academic Year 2024-2025, the total 12-month annual support for students in a guaranteed year of funding is \$48,080. First-year students will begin receiving support when they matriculate in September and annual support will be prorated for the first year.

The Columbia University Graduate School of Arts and Sciences (GSAS) and all Departments at the Mailman School of Public Health consider PhD training to be full-time effort for 12 months per year. The University's commitment to [fully funding](#) our trainees pursuing a PhD is to allow them to focus entirely on all aspects of their training: coursework, research, teaching, dissertation-related activities, professional development, other training activities (e.g. seminars, colloquia, journal clubs, workshops), and service to the institution. PhD trainees, therefore, are discouraged from taking on additional employment. There are a number of sources of funding for our PhD students. PhD students may be

supported by one or more of the following:

- [Federally funded training program fellowships \(departmental or institutional\)](#) are available in a number of research areas. Multiple training programs in the University are open to PhD students in Epidemiology. These programs provide focused, structured training in a substantive area while providing predoctoral fellowships with tuition support and stipends. Application procedures and deadlines for federally funded training program fellowships vary by program. Fellowships usually require an additional program specific application and an interview.
- Other scholarships and fellowships arising both inside and outside the University.
- Federal research grants, including parent research grants, [diversity](#), and other supplements to these parent grants.
- Federally funded and other individual dissertation grant awards (e.g., [F31](#) and [R36](#)). If awarded and the grant award meets certain criteria, PhD students will receive a \$3,000 bonus.
- Other engagement in part-time research, teaching, or service positions in the Epidemiology Department or other units.

Trainee appointments are set at 20 hours per week, irrespective of funding source (e.g., T32, F31, R36, TL1, NSF, GRA, or other support administered through the University). The educational components comprise the balance of full-time effort.

Starting in Year 3, PhD students are expected, when possible, to also work with their faculty mentors to apply for extramural fellowships and grants (e.g., individual dissertation grant awards) to support their research in Years 4-5 and gain valuable, career-building grant proposal writing skills. PhD students are strongly encouraged to work with their faculty mentor to submit a dissertation grant in **Year 3** of the program. An *initial* submission beyond year 3 requires explicit permission from the department in advance and will be evaluated on a case-by-case basis in light of academic progress and other considerations. Students seeking to apply initially after Year 3 are required to prepare a brief pre-submission prospectus and explanation to be reviewed by the primary mentor, the PhD grant writing instructor, and the PhD Steering Committee Chair as early in the process as possible.

Funding beyond five (5) years is not guaranteed. However, in year six (6), if a student is funded by an external award in their name from the National Institutes of Health (NIH) (e.g. F31, R36), or grants from foreign research entities or foundations that provide funding comparable to NIH funding levels for predoctoral students, departments will supplement the funding in year six (6) to bring students' financial support to union-mandated levels. Supplemental funding for year six (6) is subject to departmental and institutional review, including considerations of satisfactory academic progress. Neither School nor Departmental funding will be considered, nor will be available, beyond year six (6). Should a student's mentor wish to provide supplemental funding beyond year six (6) for the student who has secured external funding in their name (e.g. F31, R36), the School and the Department will permit the funding. Students may be funded on an investigator's GRA and, in very rare instances on a training grant (e.g., T32), beyond year five (5) but no departmental or school supplemental funding will be provided.

PhD students are expected to conform to a high standard of [professionalism](#) (see Section IV) both in their interactions with students and in working closely with faculty and staff. These specifications, as with all specifications in this document, are subject to changes in departmental, school, medical center, and university policies over time. Students who enter the program at a certain point in time are subject to all such policy changes after the point in time at which they enter the program.

#### 4. [Additional Compensation and Outside Work Policies](#)

The Columbia University Graduate School of Arts and Sciences (GSAS) and all Departments at the Mailman School of Public Health consider PhD training to be full-time effort for 12 months per year. The University's commitment to [fully funding](#) our students pursuing a PhD is to allow them to focus entirely on all aspects of their training: coursework, research, teaching, dissertation-related activities, professional development, other training activities (e.g. seminars, colloquia, journal clubs, workshops), and service to the institution. PhD students, therefore, are strongly discouraged from taking on additional employment.

However, the School and University permits PhD students to take on additional work within the school up to 8 hours/week. Any additional work cannot interfere with a student's progress toward degree completion and is subject to a range of federal grant restrictions. Additional work paid through Columbia **must be pre-approved by the Department, the Dean's Office, and the Sponsored Projects Administration via submission to the Salary Review Committee**, must adhere to the stipulated pay rates for PhD students determined by the school, and meet the minimum compensation requirement stipulated by the UAW-SWC contract.

Work outside Columbia is not governed by the University, School, or Program, but must still conform with NIH rules, should not exceed 10 hours per week, and should not hinder progress toward degree completion to degree (as evaluated by each Department).

Scholarships, foundation grants, and other awards (e.g. conference travel award) that do not require a student to be engaged in a traditional employee/employer relationship or a *quid pro quo* work effort are permissible but must be declared to the Department.

Students who wish to participate in externships with compensation in excess of the GRA minimum may waive their summer payments to accept the external payment. The department will continue to fund student health insurance and tuition, and fees. Externships must be pre-approved by the Department, the Dean's Office, and Sponsored Projects Administration via submission to the Salary Review Committee.

**Requests to receiving additional compensation or engage in externships must be submitted to the Director of the Epidemiology Department's PhD Committee (Dr. Jeanine Genkinger; [jg3081@cumc.columbia.edu](mailto:jg3081@cumc.columbia.edu)) no less than three weeks in advance of the beginning of the proposed additional compensation or outside work (e.g., externship).**

## Section III- Advising and Departmental Engagement

Engagement between department faculty and students is at the heart of the PhD program in Epidemiology at Columbia. There are many ways in which a student can engage, some optional and some built into the structure of the program. These include working with an academic advisor and/or other faculty, later, a dissertation Sponsor and dissertation committee, membership in a department research unit, journal club, joining a research team, and forming or joining student work groups or interest groups.

### 1. Advising

Upon admission to a PhD program in Epidemiology, each student is assigned an academic advisor. During the student's first years in the program, the academic advisor provides information and recommendations regarding coursework, qualifying examinations, and other academic issues.

Although the academic advisor initially assigned often serves through the qualifying examinations and sometimes through to the dissertation defense, students may request a change once they become familiar with the faculty and their interests become more focused. The academic advisor may or may not later serve as the dissertation Sponsor. When a student chooses a Sponsor for the dissertation, that person may become the student's academic advisor as well. However, students should feel free to keep an academic advisor in addition to a Sponsor. The academic advisor and later the dissertation Sponsor discuss ongoing progress with the student and complete the required Annual Progress Report Form with the student. Please see [here](#) to find more information on sponsor for the dissertation and [here](#) for more information on mentoring.

Students are also encouraged to talk with the Director for Academic Programs and the Director of PhD Program about courses, exams, upcoming activities, administrative procedures, etc. Assigned student buddies and the PhD student representatives on the committee are a good source of advice as well.

During the course of their graduate work in the Department of Epidemiology, some students may encounter problems requiring additional help. Please also see the section on [“Available resources and getting help”](#) for a list of resources that may prove useful for a range of issues.

### 2. Unit membership

The Department of Epidemiology is comprised of [units](#), reflecting areas of research and training strength. A list of faculty members, along with their areas of interest, publications, and brief biographies can be found on our [faculty directory](#).

Many areas are organized into Units which offer seminars and other academic resources. Some are linked to funded training programs. [Departmental Units](#) include chronic disease epidemiology,

environmental epidemiology, infectious disease epidemiology, violence and injury epidemiology, neuroepidemiology, psychiatric epidemiology, social and spatial epidemiology, and substance use epidemiology. Doctoral students are required to participate in a department unit although they may choose to join several units. Unit seminars are open to all students regardless of unit membership.

The unit provides an intellectual and administrative home for students and faculty and meets regularly, often through offering seminars. Some also sponsor workshops, discussions of work in progress and symposia. Usually, though not always, the student's academic advisor is a member of the same unit. These units may or may not have attached training programs that fund students.

Students are also encouraged to join the research group of a member of the faculty working in an area of the student's interest and to participate in implementing that group's research studies. Faculty members generally welcome student participation in their work. We expect students to gain a grounding in areas beyond that of their unit through coursework, research engagement, and attendance at seminars and dissertation proposal and defense presentations.

### 3. Peer engagement and mentorship

PhD students are involved in formal and informal doctoral student organizations and often form interest groups within units or on topics of interest in addition to more or less formal writing groups and study groups. The PhD student representatives assign each incoming PhD student an Epi "Buddy," a current PhD student who provides peer mentorship and insights on the "ins" and "outs" of being a PhD student at Columbia. Peer-to-peer interaction is one of the most effective approaches to learning in a doctoral program.

### 4. Staying in the loop and contributing to the Department

Getting a PhD involves more than coursework, exams, and a dissertation. Our doctoral students are a vital part of the overall intellectual community of the department. This entails building a network of colleagues and friends and becoming part of—and helping create—the community within the Epidemiology Department. We expect students to spend time in departmental "spaces," attend seminars, form study groups, work with faculty, collaborate with and mentor other students, etc. We also encourage students to get involved in departmental activities by participating in the doctoral and masters' student groups, serving on departmental committees, and the like. Many of the improvements made in our program (e.g., new courses, exam formats, events) stem from students' suggestions and willingness to participate. Important mechanisms for communicating ideas include student organizations, formal student representation on the PhD Steering and Curriculum committees, meetings with the Director of the PhD Program and Director for Academic Programs and meetings with the Vice Chair for Education and the Chair of the Department.

#### *Representation on Departmental Committees*

Many procedures and requirements affecting PhD students are formulated and implemented by the departmental or schoolwide committees and sub-committees. In addition to the PhD Steering Committee, these include the Curriculum Committee and the Schoolwide Doctoral Policy and Planning Committee. Students who volunteer or who have been selected by their peers may serve on the PhD Steering Committee, provide input, represent student interests, and communicate with and their fellow students. There are also opportunities for student input at the school and university level.

## Section IV- Program Requirements

### 1. Overview

The following section provides details of the required coursework, the qualifying examinations, the dissertation process, and waivers, exemptions, grandfathering and the honor code.

It is the expectation of the department that most students will complete the in-person PhD program, including the dissertation, within five years as a full-time student. Students who enter with a master's degree in epidemiology typically spend two years taking courses and fulfilling other program requirements of the program outside of the qualifying exams and the dissertation. Students may only defend their dissertation proposal after passing the two qualifying exams and obtaining permission from the Director of the PhD Program. In general, students will then spend an additional 6–12 months completing and defending a dissertation proposal, followed by 1–2 years completing and writing the dissertation.

### 2. Training and examination components

#### A. Expectations for prior training, skills and knowledge at matriculation

Students entering with a master's degree in epidemiology typically spend two years completing the required methods coursework which is designed to be integrated and sequential. Before undertaking the advanced methods courses required for the PhD program, students should have mastered the content found in the following courses offered for a master's degree at MSPH:

- introductory epidemiology
- observational epidemiology
- intermediate epidemiological analysis
- introductory biostatistical methods
- categorical analysis
- applied regression analysis

Incoming PhD students with little prior coursework in epidemiology or biostatistics should plan to take these courses before matriculation or in their first year. Students attending another institution for their masters may review the relevant syllabi for courses at MSPH to determine whether they have mastered the required material. These syllabi may be obtained from the Director for Academic Programs.

Matriculating students missing more than one of the prerequisite courses may need three years to complete coursework. Epidemiology III, P8400, is offered in the summer and the fall and can be taken before matriculation if that is the only missing prerequisite.

In advance of beginning in the PhD program, any student who has not completed an MPH will be required to take the online course required by the Mailman School: PUBH P6025: Introduction to Public Health.

## B. PhD Course requirements and recommendations

Required courses are designed to provide students with a solid foundation in epidemiologic methodology and to develop professional skills, and it is builds upon introductory coursework in epidemiology and biostatistics. Required courses may not be taken pass/fail.

Students are encouraged to take elective courses to build detailed expertise in substantive and methodologic areas of interest and to gain additional skills. Not all courses are offered every year (especially electives); many courses have prerequisites; some have limited enrollment; and some require the permission of the instructor. It is the student’s responsibility to ascertain and meet any prerequisites or permission requirements, and to plan their schedule far enough in advance to ensure that courses are taken in the proper order.

### i. *Sequence of Required and Recommended Training Components*

<b>YEAR, SEMESTER</b>	<b>PHD COURSE REQUIREMENTS, EXAMINATIONS, AND DISSERTATION TIMELINE<sup>a</sup></b>
<b>YEAR 1, SUMMER<sup>b</sup> (Pre-matriculation)</b>	<b>Introduction to Public Health<sup>b</sup></b>
<b>YEAR 1, FALL</b>	<b>Epidemiology III: Applied Epidemiologic Analysis<sup>c</sup> History of Epidemiology Biology and Physiology for Epidemiologists Study Design Mentored Research / Teaching Experiences</b>
<b>YEAR 1, SPRING</b>	<b>Epidemiology IV: Critical Thinking in Epidemiology Applied Regression II Publications and Presentations Responsible Conduct of Research<sup>e</sup> Substantive course / Biostatistics elective Mentored Research / Teaching Experiences</b>
<b>YEAR 2, FALL</b>	<b>Epidemiology V: Concepts in Causal Inference Substantive course / Biostatistics elective Mentored Research / Teaching Experiences</b>
<b>YEAR 2, SPRING</b>	<b>Epidemiology VI: Advanced Techniques in Epi Methods Epidemiology VII: Applying the Causal Roadmap to Single Timepoint and Longitudinal Data Grant Writing for Epidemiologic Research Mentored Research / Teaching Experiences</b>
<b>YEAR 3, SUMMER</b>	<b>Methods Exam<sup>f</sup> Mentored Research / Teaching Experiences</b>
<b>YEAR 3, FALL</b>	<b>Foundation Essay<sup>f</sup> Mentored Research / Teaching Experiences</b>
<b>YEAR 3, SPRING</b>	<b>Dissertation Proposal Mentored Research / Teaching Experiences</b>
<b>YEARS 4 &amp; 5</b>	<b>Dissertation Mentored Research / Teaching Experiences</b>

<sup>a</sup>Those students who begin the program taking masters level Epidemiology and Biostatistics courses may also have to add an extra year of coursework and will not follow the timeline in the table above.

<sup>b</sup> In advance of beginning in the PhD program, any student who has not completed an MPH will be required to take the online course required by the Mailman School: PUBH P6025 (Introduction to Public Health).

<sup>c</sup> Any student who has not completed an MPH or MS at the Mailman School is highly recommended to register or

audit the Epidemiology III course.

<sup>d</sup>This requirement is only required for students that matriculated in Fall of 2023 or after.

<sup>e</sup>Students can take P9630 or G4010 at any time prior to their qualifying exams.

<sup>f</sup>Only students in [good-standing](#) may sit for the methods examination and foundation essay.

## ii. *Additional coursework and electives*

Students should work with their academic advisors to determine the additional coursework required to meet the specific competencies of the program and to meet their individual career goals. Additional statistical and methods courses should be taken as needed. It is also expected that students gain substantive public health and epidemiologic knowledge outside their area of concentration through attendance at seminars and courses, and participation in mentored research.

## iii. *Additional Requirements*

### Seminars

PhD students are expected to attend their unit and departmental seminars (i.e., Columbia University Epidemiology Grand Rounds (CUEGRs)). They should also attend as many of the dissertation proposal and final dissertation presentations of their peers as possible.

### Training program fellows

PhD students who are funded by training programs or fellowships may have additional program or fellowship- specific requirements and should plan their schedules accordingly.

## iv. *Professional development*

MSPH encourages and supports PhD students in presenting their research at national and international conferences to foster their professional development. PhD students may have access to funds, when available, to support their research endeavors, including for conference attendance, research materials, and other necessary resources, subject to Departmental and/or School approval.

## v. *Criteria to remain in good standing with reference to required coursework*

To remain in good academic standing, PhD students must

- i. receive grades of B or higher in all *required* courses and
- ii. achieve an overall grade point average (GPA) of B+ (3.3) or higher in *required* courses as stated in the Mailman School of Public Health [Doctoral Guidelines](#).

PhD students whose grades do not qualify for good standing will be reviewed by the PhD Steering Committee with input from the course director, the student, and their academic advisor. Based on this review, the Committee will determine whether the PhD student should:

1. Continue in the program in good standing without further conditions; or
2. Continue on a probationary basis until specified conditions (e.g., additional remedial coursework, tutoring) are met (at which point the student returns to good standing); or
3. Be dismissed from the program. Dismissal from the program requires review by the Department Chair and review by the MSPH Office of Student Affairs.

Only PhD students in good standing may sit for the qualifying examinations.

### **C. Teaching and Research Responsibilities**

During years 1-5 in the program, PhD students will engage in research and teaching responsibilities in the Department of Epidemiology (or elsewhere in affiliated departments with approval from the Department of Epidemiology) most terms (Fall, Spring, and Summer). These responsibilities constitute academic requirements. The Department of Epidemiology will attempt to match PhD students with their preferences for these responsibilities, but a first choice is not guaranteed.

All PhD students at the Mailman School must engage in two semesters of a Mentored Teaching Experience (MTE). The goal of this activity is to gain experience and mentorship in graduate level teaching and to reinforce knowledge and skills in epidemiologic principles. These required teaching experiences are an integral part of training epidemiologic researchers, learning how to disseminate scientific knowledge, fully preparing for an academic career in epidemiology, and a standard part of training in comparable departments across the nation. The [Columbia Center for Teaching and Learning](#) provides training sessions in teaching for faculty and doctoral students. PhD students are strongly urged to take advantage of these sessions in developing their competencies in teaching and training. PhD students will rank available options for teaching experiences; most students in years 1 and 2 will be placed in Epi I, Epi II, Epi III, or SAS. Please consult with the Director for Academic Programs and the Vice Chair for Education if you are interested in a particular teaching experiences. Final decisions pertaining to teaching experiences rest with the Department of Epidemiology administration.

After the two required Mentored Teaching Experiences are completed, PhD students in the Department of Epidemiology may be required to serve as a Teaching Assistant (TA) no more than once per year, for which they will receive additional compensation. PhD students may also elect to engage in additional TA roles throughout the year for additional compensation (no more than one per semester), provided they do not interfere with satisfactory academic progress (see Section II.4 "Additional Compensation and Outside Work). These additional teaching opportunities are also an integral part of training epidemiologists by deepening the skills developed in the required mentored teaching experiences as well as providing PhD students opportunities for greater exposure to a broad array of substantive courses in the department. All required teaching experiences and assistantships must be fulfilled through courses in the Department of Epidemiology, unless arranged otherwise by the department.

All PhD students are also required to engage in Mentored Research Experiences (MRE), which vary by

department, and which are necessary to meet the academic and training requirements of all MSPH PhD programs and are supported by the funding package all PhD students receive, irrespective of funding source. MREs are geared towards developing the knowledge base and research skills necessary to complete successfully the dissertation and to support the transition to independence as investigators. MREs are required in years 1-5 of the program in Epidemiology and involve interaction with a faculty supervisor on research activities at the supervisor's discretion and direction. For some PhD students, this is accomplished through Graduate Research Assistant appointments with faculty investigators. For PhD students on T32 Training Grants, this activity is accomplished through engagement in 4-8 month long mentored research experiences. Responsibilities on mentored research experiences may include, but are not limited to, data collection, data management and analysis, literature reviews and syntheses, and manuscript and grant preparation. These efforts may lead to peer-reviewed manuscript co-authorship opportunities for students; early discussion of interest and expectations regarding such opportunities is strongly encouraged. Final decisions pertaining to mentored research experiences rest with the Department of Epidemiology administration.

PhD students are expected to conform to a high standard of [professionalism](#) in all research, and teaching activities, in their interactions with faculty, staff, and students. Failure to fulfill teaching and research responsibilities may negatively impact a student's academic standing in the PhD program.

## **D. The Qualifying Examinations**

### *i. Overview*

There are two qualifying examinations, one focusing on epidemiologic methods (the Methods Examination) and the other requiring synthesis and application of epidemiologic principles (and other relevant research) addressing a substantive and unresolved question in an area of interest to the student, most likely related to plans for the dissertation (the Foundation Essay). The time interval required for preparation, administration, and grading of the methods exam should be no more than four months. Students are expected to submit the Foundation Essay within six months of passing the Methods Exam.

These examinations are designed to test students' understanding of, and ability to apply, epidemiologic concepts and reasoning to substantive areas and methodologic problems. Because of the different purposes and structures of the two exams, there are separate protocols for each which are updated annually and briefly summarized below; full details and the protocol can be obtained by contacting the Chair of the exam. Students will not be examined on competencies/concepts not included in the formal PhD training unless they are so notified. Changes to exam protocols will be transparent, with clear communication between students and faculty.

Students undertake the examinations only after successfully completing all course work. The Foundation Essay can only be undertaken after successful completion of the Methods Examination. Any student planning to take an examination should let the Director for Academic Programs know of their intention at least two months in advance of the examination.

Students with documented learning disabilities should work with the [Office of Disability Services \(ODS\)](#) to receive an accommodation agreed upon with that office; ODS and the student should notify the Methods Exam Committee Chair and the Director for Academic Programs if an accommodation is granted. Due to the approximate 3-week time frame to be evaluated, all requests to ODS should be done early. Those for whom English is a second language may petition the Chair of the Exam Committee for extra time.

## *ii. The Methods Examination*

### **Purpose**

The purpose of the examination is two-fold. First, it is intended to provide PhD students with the opportunity to integrate and synthesize epidemiologic methods. The literature on epidemiologic methods changes and develops and the purpose of this exam is to understand the best methods for the question at hand, and how each method enhances valid inference. The exam also indicates to the department that the student understands epidemiologic methods sufficiently to proceed to the next stage in the PhD program.

The methods exam is designed to cover the central issues in epidemiologic methods. These include:

- Definitions of causation – both ontological and epistemological
- Causal inference
- Relationships among theory, hypotheses, and empirical testing
- Study design (including sampling and measurement strategies)
- Basic and advanced data analysis
- Confounding, bias, measurement error, mediation, and effect modification
- Interpretation of study results

### **Methods Examination Committee**

This Committee is a subcommittee of the PhD Steering Committee, and its Chair sits on the Steering Committee. The Methods Examination Committee is responsible for the exam protocol and evaluates whether the exam is functioning as expected and evaluates the outcomes. The exam questions are written by faculty members on the Methods Exam Committee. A copy of the full protocol is available from the Committee chair and is posted on the doctoral courseworks page.

### **Preparation for the Examination**

PhD students preparing to take the Methods Examination meet as a group with the Chair of the Committee in the fall of their second year of coursework to discuss the process, review the reading list, and answer questions. There is a reading list, that is updated each year, and distributed to the students. The Methods Examination, the first of the qualifying exams, is generally taken during July of the academic year after completing coursework. The exam consists of four pairs of questions. PhD students must answer one question from each pair. The exam is take-home, written under the honor code, closed book,

and lasts approximately 8 hours on a single day. Students usually form informal study groups to prepare for the exam in early part of the year (e.g., March) of their exam. Copies of previous Methods exams and reading lists are available from the Director for Academic Programs.

### Passing and Failing the Methods Examination

Graders, committee members of the Methods Examination Committee, are blinded to the identities of the students. PhD students will receive a letter grade for each exam question. Students who receive a grade of B or better on all questions have passed the methods examination; a passing grade on this exam is required to move forward to the foundation essay, the second of the qualifying exams. Grades will be completed and returned to students within 45 days of receipt of the exam.

*Rewrites/Failing:* Students who receive a B- or lower on a single question must rewrite the question they have failed and answer the other question in that section. Rewritten questions receive a grade of excellent essay, passing essay or failing essay. If the student receives a grade of “failing essay” during the rewrite period, the student must complete a remediation task designated by the Methods Exam Committee. Remediation tasks receive a grade of excellent task, passing task or failing task. If the student fails this task, the student fails the methods exam. Students can (and are encouraged) to meet with the Methods Exam chair and the members who wrote that section for feedback to help them prepare the rewrites or remediation tasks; timelines for rewrites will be in accordance with the Methods Examination protocol and / or determined with the Method Exam Chair.

*Failure to submit an answer to one question:* PhD students who fail to submit an answer to one question will not have passed the exam and will not be allowed to complete a rewrite for that question within that year. Such students will have to take the omitted question the following year.

*Failing examinations:* PhD students who receive a grade of B- or lower on two or more questions have failed the exam and must retake it the next year. Students may only take the exam twice. If a student fails the Methods Exam the first time, the PhD Steering Committee will review their progress in consultation with both the student, their academic advisor and the Chair of the Methods Exam Committee prior to the student’s second attempt in the following year. They will discuss whether they perceive a need for any specific remediation prior to retaking the exam; details of the remediation plan will be developed by the student in coordination with the Chair of the Methods Exam Committee. The signed and dated remediation plan will be reviewed at the PhD Steering Committee level. If the student fails a second time, the PhD Steering Committee will recommend to the Chair of the Department of Epidemiology and the Mailman School Academic Standards Committee that the student be terminated from the program, in line with department, Mailman, and university policies, subject to provisos outlined in Section IV.B-iii.

### iii. *The Foundation Essay*

#### Purpose

The purpose of the foundation essay, as a second qualifying exam, is to demonstrate the student's readiness to commence work on the dissertation. The quality of the Essay will be regarded as evidence of the student's ability to research and write a defensible dissertation. In this essay, the student will identify a significant epidemiological problem, critically evaluate existing evidence relating to the problem, and propose specific aims to address the problem.

PhD students will have two options for the foundation essay:

1. Write a background essay that for many may lay the foundation for their dissertation proposal.
2. Submit an individual dissertation grant award application (e.g., via an F31 or R36 mechanism to the NIH) plus an abridged essay to expand upon the principal argument for their aims.

### Foundation Essay Committee

This Committee is a subcommittee of the PhD Steering Committee and its Chair sits on the PhD Steering Committee. The Foundation Essay Committee oversees the Foundation Essay by setting the protocol and timeline, providing a rubric to guide the grading process, and administering the grading itself. A copy of the full protocol is available from the Committee chair and is posted on the doctoral courseworks page.

### Preparation for the Essay

PhD students preparing to take the Foundation Essay meet as a group with the Chair of the Committee in late summer / early fall after their methods examination to discuss the process, the protocol, and answer questions. A copy of the full protocol can be obtained from the Chair of the Foundation Essay Committee and is posted on the doctoral student courseworks page. The Foundation Essay may only be submitted after a PhD student has successfully passed the Methods Examination. This essay should be submitted by the third bi-monthly deadline after successfully passing the methods exam (deadlines are specified in the detailed protocol; for most students this is typically five months after passing the Methods Exam). A passing grade on this essay is required to move forward to the dissertation stage.

### Requirements

Under the supervision of the student's dissertation sponsor or other faculty mentor chosen by the PhD student, the student should either

1. write an essay of no more than 12 single-spaced pages that includes the following:
  - a. A statement of the research question(s)
  - b. An analytic synthesis of relevant literature
  - c. Identification of barriers to resolution
  - d. Articulation of and justification for at least two specific aims
2. submit their individual dissertation grant (e.g., F31, R36) award application (background, innovation, and approach sections) along with a 6–8-page abridged essay that includes the

following:

- A statement of the research question(s)
- An analytic synthesis of relevant literature
- Identification of barriers to resolution
- Articulation of and justification for at least two specific aims

The requirements of the abridged essay are further delineated in the Foundation Essay Protocol.

### Topic

The research question to be approached often evolves into the PhD student's dissertation although this is not a requirement. Students may also address a broader topic looking to discover key research gaps and later settle on a research question for the dissertation.

### Evaluation

Two graders initially blinded to the PhD student's identity and who are members of the Foundation Essay Committee will determine whether the Essay provides sufficient evidence of the student's ability to write a defensible dissertation. Grading will be based on a detailed rubric to be distributed to students, covering the following domains:

- Writing a logical, coherent argument supporting the selected research question
- Providing a synthesis of the literature to support this argument
- Identifying unresolved questions or barriers to resolution of the research question
- Articulating specific aims supported by this argument
- Quality of writing

### Grading

The graders submit their recommendation (a grade of pass, minor revisions, conditional pass, major revisions, or fail) to the chair of Foundation Essay Committee, typically within 45 days of submission. If the essay meets the definition of pass, the student may move on to complete and defend a dissertation proposal. If the essay meets the definition of conditional pass, minor revisions required, the student will receive both sets of comments and is expected to submit a revision within four weeks. If the essay meets the definition of major revisions required, the Exam Chair will set up a meeting with the student, graders, Director of Academic programs and mentor to review comments and develop a timeline for the revision. If the essay meets the definition of fail, the Foundation Essay chair will set up a meeting with the student, graders, Director of Academic programs and mentor to review comments and develop a formal plan for remediation and essay revision with a specified timeline; this will be shared with the PhD Steering Committee Chair. Failure to receive a Pass on the third attempt will be referred to the Director of the PhD Committee to determine if a formal review of standing within the program is required before further attempts at the Foundation Essay are made. The PhD Steering Committee will determine if a full review of

academic standing is warranted, which may result in a recommendation to the Department Chair and the Mailman School Academic Standards Committee that the student be terminated from the program in line with department, Mailman and University policies, subject to provisos outlined [here](#).

#### *iv. Examination results, appeals, and good academic standing*

##### Receiving examination results

The Chairs of the two examination committees will inform PhD students in writing of their examination results and enclose a copy of the comments of the graders. They will also inform the Director of PhD Program in writing of the grades (for the Methods Exam, it will include the grade for each question as well as the overall grade for each student). A copy of the examination questions and answers will be retained in the student's file, though exam grades will not appear on a student's transcript.

##### Appealing an examination grade on either the Methods Examination or the Foundation Essay

PhD students who wish to question the grade for the examination should first speak with the Chair of the appropriate examination committee and request that the examination (or the relevant exam question or essay section) be reviewed by the graders, following the procedures set down by that exam committee. The graders may adjust the grade following this informal review. If the student is not satisfied that the exam has been appropriately graded, they may appeal the grade formally within 30 days from receipt of the grade to the relevant exam committee explaining the grounds for the appeal.

The relevant exam committee sets the format and timeframe for the appeal. Should that appeal fail and the student wishes to further challenge the grade, they may direct the appeal to the Director of the PhD Steering Committee (GSAS uses the term Director of Graduate Studies, synonymous with Director of the PhD program, or Chair of the PhD Doctoral Program) within one month of the rejection by the exam committee. The Director of the PhD Steering Committee will then forward the appeal, the exam protocol and question as well as the original exam to an ad hoc subcommittee of the PhD Committee Faculty who will make a final determination regarding the grade in question. If the appeal is denied and the student believes that the decision is unjust, the student may appeal (within two weeks of receiving the appeal rejection) to the Chair of the Department. If that appeal is denied, the student may appeal to the MSPH Vice-Dean for Education who will decide whether there are grounds to the appeal. There is no further appeal.

##### Examination grades needed to remain in good standing

In order to continue in the program and undertake the dissertation, PhD students must pass both exams. Therefore, students whose final grade on an exam is a "fail", and who either do not mount or succeed on an appeal of the grade, will be reviewed by the PhD Steering Committee, with input from the student and their academic advisor. Based on this review, the PhD Steering Committee will assess whether there are extenuating circumstances (e.g., major illness, family emergency) that justify continuation in the program or whether to recommend that the student should leave the program and not go forward to the Dissertation stage. In the former case, the committee may require that the student complete additional coursework, tutoring, written work, and evaluation to the standard of the exams before

proceeding to the dissertation. If a student passes both exams successfully but does not complete and successfully defend a dissertation by the University time limits, the PhD student will leave the program with an MPhil. In the event that the PhD Steering Committee recommends that a student is asked to leave the PhD program at any stage, before or after the receipt of the MPhil, the student's performance will be reviewed by the Department Chair and the Dean of Students. This is in accordance with [GSAS guidelines](#).

### 3. The dissertation process

#### A. Overview

There are several steps to getting a dissertation off the ground and completed, listed here and explained in detail in later sections. These steps include:

- Finding a dissertation topic and question
- Finding a sponsor and negotiating a project
- Forming a PhD dissertation proposal committee
- Writing and revising the dissertation proposal
- Defending internally the dissertation proposal
- Presenting externally the dissertation proposal (public seminar)
- Forming a PhD dissertation defense committee
- Obtaining IRB review and approval of the dissertation research
- Writing and revising the dissertation
- Changing your approved aims
- Meeting additional requirements for papers submitted as part of the PhD dissertation
- Preparing for the dissertation defense
- Conducting the defense
- Depositing the dissertation
- Participating in commencement ceremonies

#### Some important points to note:

- Many of the rules about setting up a dissertation committee, defending a proposal, formatting the dissertation, and defending the final product are set by GSAS for PhD students. The GSAS rules for the PhD are available online [here](#).
- It is essential that both the PhD student and sponsor read and follow [GSAS guidelines](#).
- If you have questions, ask the Director of the PhD Committee and/or Director for Academic Programs; it is easier to fix a problem at the outset than at the end of the process.

#### B. Finding a dissertation topic and question

PhD students are encouraged to begin thinking about potential dissertation projects while completing their coursework and preparing for qualifying exams. The Foundation Essay is designed to facilitate the identification of an appropriate topic. While there is no single or "best" way to choose a dissertation

topic (and many students consider multiple possibilities before making a final selection), there are strategies that help. Those include:

- Reading journals, attending seminars and conferences, and talking with faculty and students may generate ideas.
- Identifying available data sets (e.g., from projects of faculty members or public use data) may help narrow the field of interesting questions to those that are “doable”.
- Looking over proposals and dissertations filed with the department may clarify what and how much is expected in dissertation research.
- “How-to-write-a-thesis” books and seminars in grant writing may also be of assistance.
- Thinking about what type of career, you aspire to may also influence choices.
- And, perhaps most important, talk with your academic advisor and other faculty about next steps!

Dissertations submitted in fulfillment of doctoral degree requirements in epidemiology must, at a minimum, demonstrate the PhD student’s competence in the use of the epidemiologic concepts and methods that have been at the core of the PhD training. To this end, the dissertation should clearly state the public health problem the dissertation addresses, the epidemiologic methods used in the research, and the relevance of the work for health. Roughly speaking, a good metric of an appropriate health outcome for the dissertation is one that would be funded by NIH, and an epidemiologic method is a method addressed in the doctoral program methods sequence.

A growing number of dissertations are interdisciplinary or transdisciplinary in nature, incorporating questions where the definition of health and wellbeing is broad and where the methods are borrowed from adjacent fields and are not identifiable as traditionally or uniquely “epidemiologic”. These dissertations may be acceptable as long as the non-epidemiologic components are in service of an overall epidemiologic project. For example, of two empirical chapters, one might deal with laboratory characterization of a biomarker, and the other with a case-control study testing the association of that biomarker, based on the results of the laboratory work, with a health outcome. Or, an empirical paper could incorporate qualitative methodologies, the insights of which inform a quantitative analysis. Dissertations incorporating non-traditional health outcomes or epidemiologic methods would also require that the student obtained sufficient expertise and mentorship in the relevant substantive and/or methodological domains. While interdisciplinary and transdisciplinary work is encouraged, the dissertation must demonstrate competence specifically in epidemiology. Students considering a dissertation topic or individual aim that may incorporate such non-traditional elements are strongly encouraged to consult with the Director of the PhD Steering Committee while the aims are under development.

### **C. Finding a sponsor (also known as (aka) Dissertation Advisor by GSAS) and negotiating a project**

Once a PhD student has identified a potential topic or question of interest, it is time to find a sponsor, i.e., someone who conducts research in the chosen area, meets [GSAS list of Approved Dissertation Sponsors](#) in Epidemiology, and is willing to provide guidance and support on an ongoing basis. The sponsor need not be the person who “owns” or provides the data, although that person may be a member of the dissertation committee. Students work closely with their sponsor, with the additional engagement of other members of the dissertation committee, to develop a dissertation proposal and

conduct their dissertation research.

Two strategies used by many PhD students to identify potential sponsors are joining a research group while taking courses and/or engaging in teaching or research rotations with faculty members whose research appears interesting. These strategies help PhD students find faculty networks that may lead to a dissertation. Students who are having difficulty locating potential sponsors are encouraged to talk with their academic advisor to secure their academic advisor's assistance in contacting faculty whom they may not know personally. Adding the line "I am contacting you at the suggestion of Dr. XYZ" increases the likelihood of a quick response from faculty. In addition, students may schedule an appointment with members of the Doctoral Committee or any member of the faculty to brainstorm ideas about possible projects and sponsors. Further guidance can be found in the doctoral program policy on mentoring available in **Appendix 3**.

Once a potential sponsor is identified, the PhD student and sponsor work together to define a dissertation project, identify appropriate data, discuss possible committee members, and construct a timeline for completing the proposal and research steps. This is essentially a negotiation from which either party can withdraw if a mutually agreeable project is not found. Note, whereas some potential sponsors suggest an area for a dissertation to a student, which the student then develops into a research question with specific aims, other potential sponsors expect students to take the lead in choosing an area and defining a research question and see their role as providing suggestions and advice along the way. Whichever of these approaches is followed, the student must conceive of and execute the specific aims, the hypotheses and the approach. This means that a student's dissertation work may not simply fulfill specific aims already fully developed by someone other than the student. The student's dissertation work may relate to a specific aim already developed in a grant but not constitute sole fulfillment of that aim. The student's work must reflect their original development of ideas, analytic strategies, and interpretation.

#### **D. Forming PhD dissertation committees**

Dissertation committees are comprised of two parts: Part 1 is the *Dissertation Proposal Committee*; and Part 2, following the successful dissertation proposal defense, is the *Dissertation Defense Committee*.

The responsibility for selecting and recommending the dissertation committee members rests with the Sponsor (aka Dissertation Advisor). **PhD students may not select their own dissertation committees.** Furthermore, PhD students should not be placed in the position of having to ask particular faculty members to serve on their dissertation committees. It is the responsibility of the Sponsor—*not the student*—to identify potential committee members and to obtain their agreement; however, it is expected that the student will have input into their selection and be introduced to faculty they may not know.

##### ***The Dissertation Proposal Committee***

The Dissertation Proposal Committee is composed of exactly three members: the Sponsor (aka Dissertation Advisor), the Committee Chair (aka Dissertation Defense Moderator), and the Second Reader (aka Third Committee Member); all need to be within the Department and must be on the [GSAS](#)

[list of Approved Dissertation Sponsors](#). The Chair and Second Reader must be selected early enough so that they can provide input on preliminary drafts of the specific aims and proposed data sources. These committee members also provide feedback on the proposal draft, approve the proposal for and participate in the internal proposal defense, and approve the proposal for and attend the external presentation proposal defense. The Chair and Sponsor must attend the internal proposal defense and external presentation proposal defense in person but the Second Reader may be teleconferenced in. These three must approve and sign the dissertation proposal approval form before the student proceeds further with the dissertation.

### ***The Dissertation Defense Committee***

Once the dissertation proposal is successfully defended, the student embarks on the dissertation writing, with ongoing involvement from the three members of the dissertation proposal committee. If necessary, and with the advice and consent of the Sponsor, changes in the Committee Chair or Second Reader roles are possible at this stage; this change should be discussed with the Director of the PhD Committee as well as the Director of Academic Programs. Ultimately, the Sponsor, with input from the committee and the PhD student, selects two additional members to be part of the Dissertation Defense Committee. The GSAS delegate at MSPH reviews the committee membership at the time when the Application for Defense form is submitted. At least three of the members of the final dissertation defense committee must be from the list of [Approved Dissertation Sponsors](#), and at least one, but preferably two, of the five must fit one of the following categories:

- A faculty member, clinician or practitioner who holds a position **at another university or research institution**
- A full-time faculty member, research scientist, or adjunct professor at Columbia University **outside the student's own department or program**  
OR
- A full-time faculty member whose appointment is at **Barnard College, Jewish Theological Seminary or Union Theological Seminary**

Someone proposed for membership on the dissertation defense committee who

- does not have a Columbia affiliation or
- does not serve at Columbia in an adjunct capacity or
- does not hold a PhD,

and who has not been previously approved by the University to serve on a defense committee must be preapproved. The Sponsor must submit a copy of the curriculum vitae of the committee member to the Director for Academic Programs for Epidemiology who will send a copy of the curriculum vitae of this committee member to GSAS for approval ([See here for further details](#)). Please see committee member roles below for further description.

### **Committee member roles**

The **Sponsor, aka Dissertation Advisor**, is a member of the Department of Epidemiology with prior experience on dissertation committees and works most closely with the PhD student from the start.

Though the student must shape their own aims, hypotheses, and study design, the sponsor mentors the student as they refine the aims, hypotheses, and design throughout the process.

It is suggested that the sponsor and the PhD student jointly agree on a written learning contract as suggested by Appendix 3. Mentoring Document. In addition to regular meetings regarding the development of the dissertation, the sponsor has the responsibility to review annual progress with the student annually as set out in the guidelines.

It is expected that the **Chair, aka Dissertation Defense Moderator**, and the **Second Reader, aka Third Committee member**, will be actively involved throughout the dissertation writing process. They should provide early input and approval of the specific aims and adequacy of the identified data source to address those aims. While the aims will be refined as the proposal is fleshed out, early input from the committee members helps ensure a constructive, collaborative process throughout. In addition, they will read several drafts and provide comments on the refined aims, design, and analytic approaches. It is expected that the committee meets with the student at least once a semester, after the initial aims are approved. They will, at a minimum, read and critique at least one to two full draft(s) of the proposal and will attend the internal proposal defense and determine if the student can move on to the external proposal presentation. After attending the external proposal presentation, the Chair and Second Reader, along with the Sponsor, approve the final proposal, pending any final changes needed based on discussant comments at the external proposal presentation. Later, they will carefully review and critique the chapters in the dissertation itself before the dissertation defense and with the Sponsor decide when the dissertation is ready to be formally distributed to the full committee in preparation for the defense.

The **Chair** should be a senior member of the Epidemiology Department, a professor or associate professor with experience of dissertation committee membership. Their role is to guarantee that the dissertation process moves forward smoothly in accordance with the university and departmental guidelines. In the event conflicts arise between a student and sponsor or other committee member, the Chair may be able to mediate the disagreement and enable the process to move forward without recourse to the Director of the PhD Doctoral Committee or the Vice Chair for Education. The Dissertation Committee Chair chairs the internal proposal defense, the discussion at the external proposal presentation and the discussion at the final closed dissertation defense. If sudden unexpected circumstances dictate that they cannot be present, arrangements must be made for someone else to run the public defense. The Chair is also responsible for ensuring the rigor of the dissertation defense and the opportunity for the PhD student to be examined and challenged as a subject matter expert on the topic of their dissertation. This can be facilitated by performing this role themselves and/or coordinating with other committee members.

**The fourth and fifth committee members** provide an independent assessment of the dissertation and enhance the robustness of the dissertation defense. In general, they are not involved in the development of the dissertation and thus come to the defense with a fresh approach. Sometimes, however, a dissertation requires expertise from outside the department (e.g., statistical expertise, content expertise or skill with particular methods). In that case, one of these members may provide input at earlier stages in the process. However, at least one member of the full dissertation defense committee should not be involved in the dissertation writing prior to the defense.

**The Director of Academic Programs**, in coordination with the Sponsor, is responsible for scheduling the external dissertation proposal presentation, the external dissertation defense, and the closed session of the defense. Once the core dissertation committee has decided the student is ready to progress to a defense, the Sponsor should reach out to the Director of Academic Programs as soon as possible to handle scheduling.

#### **E. Timing of choosing a sponsor and formation of the committee**

Most PhD students choose a sponsor after undertaking the Methods Exam; however, some choose a sponsor prior to the student's successful completion of the qualifying examinations. The student may begin planning for the dissertation with the appropriate faculty support. However, a student may not defend a dissertation proposal before having successfully completed both qualifying examinations. Working with a sponsor on the preliminary stages of a dissertation before completion of the qualifying examinations may in no way be interpreted as permission to defend a proposal or to defend a dissertation.

PhD students who plan to collect their own data for their dissertation are strongly advised to begin working with a sponsor before attempting to decide on study design, instrument selection, or questionnaire development. The sponsor will decide in consultation with the student on the timing of committee formation, but the chair and first reader must be selected within the first month to approve the specific aims.

#### **F. Writing and revising the dissertation proposal**

The dissertation proposal should follow NIH guidelines for research though the proposal can be up to 25 single-spaced pages long. The proposal should include the sections listed below and be reflective of the requirements and goals of the dissertation. To ensure that the proposal does not become unduly long, page limits are suggested for each section. The first four sections should not exceed 25 pages in total.

- **Specific Aims:** State concisely and realistically what the research described in the application is intended to accomplish and/or what hypotheses are to be tested. (1-2 pages)
- **Significance:** Briefly sketch the background to the proposal, critically evaluate existing knowledge, and identify specific gaps that the project is intended to fill. State concisely the importance of the research described in the proposal by relating the specific aims to longer- term objectives. State the relevance to public health. (3-6 pages)
- **Preliminary Studies (optional):** This section may be used to describe preliminary research of the student that is pertinent to the proposal and/or other information that will help to establish the experience and competence of the student to pursue the proposed project. (1-3 pages)
- **Research Design and Methods:** Discuss in detail the research design and the procedures to be used to accomplish the specific aims of the project. Describe the protocols and data

to be used and the tentative sequence or timetable for the project. Include the means by which the data will be analyzed and interpreted including a DAG (unless a DAG is not appropriate). Justify the proposed sample size with statistical power calculations. Describe the chosen methodology and its advantage over alternative methodologies. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the specific aims. (12-20 pages)

- **Literature Cited:** Although no page limitation or number of references is specified, make every effort to be complete but judicious in compiling a relevant and current bibliography.

*i. AI Policy: Permitted sparingly with Attribution*

During any phase of the dissertation, students are strongly discouraged from using Generative AI Tools, other in the most sparing ways such as ChatGPT for basic copy-editing or as a complementary search engine. To maintain academic integrity, students must disclose any use of AI-generated tools and/or material. As always, students must properly use attributions, including in-text citations, quotations, and references.

A student should include the following statement in assignments to indicate use of a Generative AI Tool: “The author(s) would like to acknowledge the use of [Generative AI Tool Name], a language model developed by [Generative AI Tool Provider], in the preparation of this assignment. The [Generative AI Tool Name] was used in the following way(s) in this assignment [e.g., brainstorming, grammatical correction, citation, which portion of the assignment].”

Students are strongly encouraged to discuss with their sponsor in advance of use of any generative AI tools or materials. If you are unsure about the policies on using generative AI, clarify with the Chair of the PhD committee.

**When submitting the final proposal to the core committee, the student must include a [Turnitin](#) summary report for the sponsor.**

## **G. Changing approved dissertation aims**

After the PhD student has completed their external dissertation proposal defense and prior to defending their dissertation, a student may change one or more of their aims (in accordance with the guidelines of the aims for the dissertation) only with the approval of their three committee members (sponsor, chair and second reader).

## **H. Defending the dissertation proposal**

The dissertation proposal defense consists of two sequential steps: [internal](#) and [external defense](#) of the **proposal**.

*i. Internal defense*

PhD students must defend their proposal to their three-member dissertation proposal committee (the

Sponsor, Chair, and the Second Reader); however, they can include the other two-committee members in the internal defense if the sponsor and student think their expertise is necessary. If the other two-committee members are included, they do not contribute to the evaluation of the internal defense.

As noted earlier, the three committee members must review the proposal and agree that it is ready to be defended. At the internal defense, the PhD student meets in person with their Sponsor, Chair, and Second Reader. Absent members may be included via teleconferencing. The student typically provides a brief five- minute introduction to the proposal, raising issues they wish to address and the committee questions the student on any aspect of the proposal; the internal defense should not be considered a dry run of the external dissertation proposal presentation. The internal defense usually lasts approximately one to one and a half hours.

Sometimes, the discussion following the internal defense raises important questions about the aims, study design, or analyses that need to be addressed before the proposal is presented for the external dissertation proposal presentation (external defense). In some cases, the committee may decide that the internal defense was premature and agree to repeat it, with no negative consequences for the student. If revisions are major, the proposal should be revised and reviewed by the sponsor or committee before scheduling the external dissertation proposal presentation (external defense). If the requested revisions are minor and those revisions have been made, the student may proceed to the second stage of the proposal defense – the external dissertation proposal presentation (external defense).

#### *ii. External defense – the public seminar presentation*

Following successful internal defense of the proposal before the three-member committee, the PhD student delivers a presentation of their proposal, reflective of the goals and requirements for the [dissertation](#), at a public seminar that is typically scheduled for 11:30am-1:00pm on Wednesdays.

The public external defense presentation must take place at a publicly announced open seminar. At least two of the three committee members approving the proposal, the Sponsor and the Chair, must attend the public presentation. In addition, two members of the epidemiology faculty who are listed on the [Approved Dissertation Sponsors](#) and are not on the committee are invited by the PhD student’s Sponsor to serve as **discussants** at the presentation, having reviewed the proposal prior to the meeting. Students should send the proposal to the discussants at least four weeks prior to the scheduled public presentation. **The role of the two discussants** is to comment on the dissertation proposal in terms of both content and methodology, after the presentation. The public presentation lasts one and a half hours; the student presents for about 45-50 minutes, leaving at least 30-40 minutes for discussion first by discussants (the discussants are allowed up to 15-20 minutes to ask questions), followed by students and then the rest of the audience. Committee members **may not** ask questions at the public presentation, nor do they answer the questions put to the student.

***After the public presentation, the two discussants have the option of commenting “no major changes recommended” or submitting comments to the student and committee within three days.*** The comments will note if any recommendations for major changes to the proposal exist. The discussants, as always, are free to share any other comments on the proposal informally with the PhD student and

committee. The committee will review these and decide on any changes the student needs to make to the proposal before moving on to complete the dissertation. The Sponsor will inform the discussants as to whether the committee have adopted the recommendations or not. The Sponsor, Chair, and Second reader will then sign the external presentation proposal defense form and return it to the Director for Academic Programs to be filed.

### **I. Obtaining IRB review and approval of the dissertation research**

All researchers, including PhD students and sponsors, must obtain IRB approval from Columbia University and other participating sites (if applicable) for research involving human subjects prior to recruiting participants, collecting data, or analyzing data. Columbia Policy on students as researchers is set out in [Research | GSAS \(columbia.edu\)](#)

PhD students must comply with all IRB regulations that may be related to their work. Students are advised to speak with their sponsors (and whoever “owns” or provides their thesis data, if different) early in the process of developing their proposal to ensure that IRB applications are filed and approvals are received in a timely fashion. The principal investigator of a previously approved study that has generated data that a student plans to analyze for their dissertation must obtain approval to add that student to the list of research personnel listed on that protocol. Students need to have completed the relevant CITI modules (also available on the IRB testing site). Those who are undertaking research with minors must complete a specific additional module. Students are also advised to check the IRB website for related materials and speak with IRB representatives if they have questions regarding procedures.

### **J. Writing and revising the dissertation**

PhD students may choose between two formats for their dissertation: 1) “traditional” book-like format, and 2) or a “manuscript”-like format. Please see descriptions below. The student must select one format only. A “hybrid” dissertation combining two formats is not permissible. The student may later change the format selected, provided all members of the Dissertation Committee approve. The choice of format does not affect other requirements for fulfilling the doctoral degree. Since 2005, all students have chosen the “manuscript”- like format and the department is discussing eliminating the book format.

The “**traditional” book-like format** consists of a comprehensive, integrated set of chapters that provide a rationale for the thesis specific aims, review of the relevant literature, description of study methods, presentation of findings, and a conclusion. Examples of dissertations following this format are available online

at ProQuest/UMI and Academic Commons (Columbia’s online research repository). The option for the book format may be dropped in the next year.

The “**manuscript”-like format** consists of a brief introductory chapter usually distilled from the proposal, a series of three publishable papers, the first of which is some type of systematic literature review addressing a central aim of the dissertation followed by two empiric papers, and an integrative concluding chapter. There may be an appendix that more fully describes the study methodology. The second format is designed to give students supervised experience in preparing the kind of succinct and focused

manuscripts required by most scientific journals as well as to encourage the publication of doctoral dissertation research.

The department has established that the dissertation in manuscript-like format should consist of the following:

- *Chapter 1*: A brief introduction summarizing the rationale and overall aims
- *Chapter 2*: A comprehensive literature review addressing a question of importance to the specific aims of the dissertation. The literature review must be either a systematic or structured review, current, and otherwise suitable, if adapted to meet journal requirements, for standalone submission to a journal as a review article. Conforming to the standards of a systematic or structured review, the chapter must include the search criteria, data sources, quality standards, and plan for the extent of the search. It should address relevant theories, methods and arguments in the field, as well as the biological, environmental, psychological and socio-historical contexts of the disease or condition and include any other material necessary to build a logical and persuasive justification for the focus of the dissertation. The systematic or structured review should be of publishable quality. Though it is difficult to define publishable, the committee should adopt standards similar to those used in reviewing papers for epidemiological journals.
- *Chapters 3 and 4*: Two empiric papers of publishable quality consistent with the standards of a peer-reviewed journal in the field of epidemiology. These papers are often longer than the paper in publishable format. Though it is difficult to define publishable, the committee should adopt standards similar to those used in reviewing papers for epidemiological journals.
- *Chapter 5*: A final chapter that integrates and discusses the findings of the papers. It should include discussion of the conclusions of the research and their relationship to the specific aims and should make recommendations for further studies. It should note the contribution to science and to the health of the public.
- *Appendix*: An appendix outlining in detail the study methods and the rationale for decisions made. Tables too long and detailed for the text may be included in the appendix. If applicable, the appendix also includes papers submitted for publication (that are based on the dissertation aims and data).

## **K. Meeting additional requirements for papers submitted as part of the PhD dissertation**

### *i. Supervision and enrollment*

The dissertation work must be done under the supervision of a Columbia faculty member with an appointment in Epidemiology and must be submitted while the student is enrolled as a PhD student in epidemiology.

### *ii. Specific aims and hypotheses*

PhD students must develop the aims, hypotheses and analytic approaches used in their dissertations.

This means that a student's dissertation work may not simply fulfill specific aims already fully developed by someone other than the student. The student's dissertation work may relate to a specific aim already developed in a grant, but not constitute sole fulfillment of that aim. The student's work must reflect their original development of ideas, analytic strategies, and interpretation.

### *iii. Epidemiologic content*

Dissertations submitted in fulfillment of PhD degree requirements in epidemiology must demonstrate the PhD student's competence in the use of epidemiologic methods and concepts. Most dissertations in the Department of Epidemiology involve tests of hypotheses about exposures and outcomes. A few focus on problems or innovations in epidemiologic methods, and a small but growing number are interdisciplinary or transdisciplinary in nature, but all should have relevance to epidemiologic approaches to the health and well-being of the public. Such dissertations are acceptable if they include a significant focus on epidemiologic hypothesis testing via epidemiologic methods. For example, of two empiric chapters, one might deal with laboratory characterization of biomarker or an exposure, and the other with a case-control study testing the association of that exposure, based on the results of the laboratory work, with an outcome (usually but not always health-related). To this end, the dissertation should clearly state the public health problem the dissertation addresses, the epidemiologic methods used in the research, and the relevance of the work for health. Roughly speaking, a good metric of an appropriate health outcome for the dissertation is one that would be funded by NIH, and an epidemiologic method is a method addressed in the doctoral program methods sequence. The dissertation proposal committee will determine that the dissertation proposal and aims met this definition; any concerns around the topic of the aims should be discussed with the Chair of the PhD Committee.

### *iv. Authorship*

The PhD student must be the sole author of the papers (after termed dissertation papers) that comprise the dissertation submitted to the student's committee as the basis for the defense and, thereafter, to the university in partial fulfillment of the requirements for the PhD. The PhD student must have had the primary role in the design and execution of the studies, in the analysis, in the interpretation of the data, and in the writing of the dissertation papers.

However, under the norms regarding authorship in epidemiology, members of the dissertation committee, as well as others, may ultimately meet the criteria for co-authorship of papers submitted for publication (hereinafter termed papers for publication) that arise from the student's dissertation. Dissertation committee members may be and often are investigators on the project(s) from which the data that the student analyzes for the dissertation come. However, in agreeing to be dissertation committee members, they undertake to serve purely as mentors, challenging and guiding the PhD student toward acceptable standards of logic, validity, and clarity, but allowing them to decide how to meet those standards. Within these constraints, the framing of the questions and the interpretation of the data should be left to the PhD student. The student, committee members, and co-authors on later publications arising from the dissertation should be aware that the dissertation papers themselves are the student's work.

Any pressure from the dissertation data owner and/or sponsor to produce a publication within a given time frame should not be imposed on the PhD student as they work to complete the dissertation papers.

Before the student develops the dissertation proposal, it is helpful for the data owner and the student to prepare a data use agreement that spells out their expectations. That agreement should stipulate that, except in such cases as extreme delays in submitting for publication, the student will be first author of the papers for publication.

The dissertation papers may and should be revised for submission to journals. Papers arising from the dissertation when submitted for publication may have committee members and others as co-authors and may incorporate the co-authors' preferences regarding analytic approaches, graphic presentation, opinions, and interpretations. The papers for publication will reflect the criteria for authorship in the faculty obligation statement and those of the journals to which they are submitted.

It is preferable that papers based on the dissertation data are not submitted for publication prior to the defense. However, if a paper based on the dissertation data has been submitted for publication prior to the defense and has co-authors, it must be submitted as an appendix to the dissertation. The PhD student must submit a manuscript that represents their sole work as the actual chapter of the dissertation (mentored of course by sponsor and committee) and a statement signed by the co-authors of the paper submitted for publication, affirming that the paper submitted as a chapter in the dissertation is the student's sole work.

## **L. Preparing for the dissertation defense**

### *i. Planning*

When the Sponsor, Chair, and Second Reader agree that the PhD student is ready to distribute and defend the dissertation, a date for defense will be scheduled and the Director for Academic Programs will submit the Application for Dissertation Defense to GSAS. The Director for Academic Programs then sends the form to the Dissertation Office in 107 Low Library. The Dissertation Officer confirms that the student has accumulated the required number of Residence Units, possesses an MPhil, is correctly registered as a defending student, and has a dissertation committee that meets GSAS guidelines on committee composition; after confirming the above, the Dissertation Office provides the dissertation blue folder and the official dissertation form.

### *ii. Distributing dissertation copies to committee members*

Dissertation Sponsors typically read and provide feedback on multiple drafts of dissertation chapters/papers. The Chair and Second Reader usually read "near-to-finished" drafts or may read multiple drafts of selected chapters. Students should talk with their Sponsor about when to seek input from committee members. The degree of involvement of committee members varies substantially depending on the sponsor, the composition of the committee and the research topic. The fourth and fifth committee members often read chapter drafts as well.

Once all chapters and supporting documents have been completed and the Sponsor, Second Reader, and the Chair agree that the dissertation is ready to be defended, the student distributes the thesis to all five committee members. No less than four weeks should be allowed for committee members to read the full dissertation. Simultaneously, the Director for Academic Programs should be notified that the dissertation has been distributed so that a time, date, and place of defense may be arranged.

**At this time, the student must also submit to the sponsor a report from Turnitin on the full dissertation.**

### *iii. Scheduling the defense*

Scheduling a dissertation defense entails several steps. First, the Office of the GSAS Dean must approve the dissertation committee. The student should talk with the Director for Academic Programs about the paperwork involved early on in the process (see above). The Department of Epidemiology schedules its own defenses and then provides the GSAS Dissertation Office with the time, date, and place. Given professors' busy schedules, four or more weeks will usually be needed to find a workable defense date and time. Once a date, time, and place are set, the Director for Academic Programs notifies the GSAS Dissertation Office, which then prints the Voting Sheet that the committee members will use at the defense. The PhD student should not schedule the defense—the Director for Academic Programs in coordination with the sponsor and/or chair schedules the defense.

### **M. Conducting the defense**

The final dissertation defense will be preceded by an open public seminar followed immediately (after a 15-minute break) by a closed defense, attended only by the five committee members. Dissertation defenses are the capstone of the PhD degree, and an important professional development opportunity for our PhD candidates. The expectation is that defenses are in-person, and a maximum of two members of the dissertation defense participate remotely. In all arrangements, the chair (defense moderator) and the sponsor (advisor) must be present at the defense. If for any reason the chair and/or sponsor cannot attend in person, the Chair of the PhD committee and the Director for Academic Programs need to be notified and a formal request needs to be submitted to GSAS.

The ***open public seminar***, presided over by the student's Sponsor, will include a talk of 45 minutes, leaving 15 minutes for discussion. Members of the dissertation committee may not ask questions at the public seminar. The PhD student need not try to include all aspects of the dissertation, rather should craft and deliver an informative seminar designed for an audience who are not experts in their field. If appropriate, the student can focus on a single aim. The goal is to communicate well and share the approach and the findings with members of the department and others who attend. The talk should review the background, methods, and results and contextualize the contribution made by the dissertation to epidemiologic knowledge and, as appropriate, to public health.

The ***final closed defense*** is attended only by the PhD student and the five committee members and should not take longer than two hours. The Chair of the dissertation committee runs the defense. First there is a short discussion by the committee without the student present to determine the order of the questions and a sense of the discussion. The student returns and the committee members ask questions about the research approach, findings and their implications. When the committee members have completed their questions, the student is asked to leave the room while the committee deliberates. Committee members discuss whether the dissertation merits the conferral of the degree, and decides what revisions are required. It is the responsibility of the sponsor to communicate with the student about

required revisions. Depending on the level of revision needed, the sponsor and/or additional members of the committee will read the revised portions and determine whether the revisions are acceptable.

The committee may [vote](#) as follows:

***Approved as submitted.*** The committee may ask that minor revisions or corrections be made before the dissertation is deposited. A written description of those minor revisions should be provided to the PhD student at the defense. These minor revisions should be completed to the satisfaction of the sponsor within one month after the defense. If for exceptional reasons more time is needed, the student may apply for an additional one-month extension by submitting a letter to [gsas-dean@columbia.edu](mailto:gsas-dean@columbia.edu) with the request.

***Approved pending revisions.*** The committee may ask that more extensive revisions be made before the dissertation is deposited. A written description of those revisions should be provided to the PhD student at the defense or shortly afterward. These revisions should be completed to the satisfaction of the sponsor and, if appropriate, a relevant committee member within six months after the date of the defense. If for exceptional reasons more time is needed, the student may apply for an additional two-month extension by submitting a letter to [gsas-dean@columbia.edu](mailto:gsas-dean@columbia.edu) with the request.

***Referred.*** The committee believes that substantial work must be undertaken on the dissertation by the PhD student before it can reach a recommendation to award the degree. A detailed written description of the reservations about the examined dissertation should be provided to the student at the defense or shortly afterward. At the time of the defense, a subcommittee composed of at least three unanimously agreed upon members of the original five-member committee (and including the sponsor) will be formed. The specified revisions should be completed to the satisfaction of the subcommittee within one year after the date of the defense. A statement from the student indicating the specific changes made in response to the committee's request for revision must accompany the revised version, and both be sent to the sponsor. The sponsor will share the statement and the revised version with the members of the defense subcommittee, each of whom must communicate explicitly to the sponsor their appraisal of the revisions undertaken. A majority of the subcommittee must approve the revised version for the student to be recommended for the degree. The dissertation will then be recommended for award of the degree.

***Fail.*** The committee believes that the dissertation is not acceptable, and the PhD student will not be recommended for the degree. No candidate may have a second defense unless the Dean of GSAS concludes, upon evidence provided either by the candidate or by a member of the committee, that procedural irregularities occurred during the defense.

## **N. Depositing the dissertation**

Once the PhD student has successfully defended the dissertation (i.e., Approved as Submitted or

Approved Pending Revisions), the only remaining academic requirement beyond these revisions is the final dissertation deposit. The [dissertation deposit](#), not the defense, is the final requirement for the PhD. The availability of the dissertation to interested scholars is an integral part of the requirements for the doctoral degree. Note: it is the student's responsibility to see that the dissertation text, tables, etc. comply with the required GSAS format. If the student does not follow all the regulations concerning format, the Dissertation Office will ask the student to correct the dissertation before accepting the final deposit. The deposit-related material received at the defense includes a listing of the materials that are to be included in the final deposit, which are now deposited electronically. Depending on the committee decision as noted on the form, the dissertation must be deposited no later than one to six months from the date of committee recommendation for the award of the degree.

The digital version of the dissertation is uploaded to both ProQuest and Academic Commons. Degrees are awarded in October, February, and May of each year. The PhD student is eligible to receive the degree on the next conferral date following a completed deposit. Commencement for the three conferral dates of the academic year is held once each year in May. There are no conferral ceremonies held in October or February. Once the student has deposited their dissertation, a letter will be issued by GSAS confirming satisfaction of all requirements for the PhD degree.

## **O. Participating in commencement ceremonies**

A PhD student may choose to participate in May Commencement Ceremonies if they have distributed their dissertation to their committee before the date named as the deadline to be included in the Commencement or Convocation Program. This policy represents an operational definition of a reasonable expectation of defending and depositing a dissertation before the University deadline for conferral of October degrees. This date is published on the University website under the [academic calendar on the GSAS website](#).

### **4. Waivers, exemptions, grandfathering, and the honor code**

#### **A. Obtaining waivers for required courses**

Although rarely granted, a PhD student may request to waive required courses of the PhD program. We have provided specific guidelines for one such course, the Biology and Physiology/Pathophysiology for Epidemiologists, P9410.

*Biology and Physiology/Pathophysiology for Epidemiologists, P9410.* To apply for a waiver from this required course, a PhD student with a prior medical/clinical degree or extensive experience in biological science (including at least one course in human physiology and pathology) should provide documentation to the course director. This waiver will be reviewed and granted by the course director with documentation provided to the Director of the PhD Committee and Director of Academic Programs.

Currently, PhD students who believe they have already passed an equivalent doctoral level courses (with a grade of B+ or higher) may apply for a waiver for other required courses. Applications should be

addressed to the Director of PhD Program, Director of Academic Programs and the course director. These should include a clear rationale, a course syllabus, and transcript from the institution where the course was taken.

## **B. Exemptions from program requirements**

PhD students seeking a waiver from any other program requirement should send an email to the Director of PhD Program and Director of Academic Programs explaining the request and explaining the rationale for the request for waiver.

## **C. Grandfathering students when academic requirements change**

In general, the applicability of program changes depends on the stage within the program that the PhD student has reached. The procedures and requirements before taking the comprehensive exams described in these guidelines apply to all doctoral students entering in the year that the guidelines were codified. Students who have completed both qualifying examinations are not affected by subsequent changes in course requirements or examinations. Those who have successfully defended their dissertation proposal are not affected by changes in requirements pertaining to coursework, qualifying exams or the dissertation proposal defense. Changes in doctoral dissertation format or content will be in effect for all students who have not yet defended their proposal or as dictated by GSAS or the Mailman School. Changes in final dissertation defense policies, such as the final defense seminar, outlined in these guidelines will pertain to all students who have not yet defended their proposals. Where a change in program requirements has an impact on students currently undertaking program elements other than as noted here, affected students will be notified by email. Students who have questions about whether requirements apply should talk with the Director of PhD Doctoral Programs; those wishing to seek an exemption should send a letter by e-mail to the Director of PhD Doctoral Programs outlining the request and offering a cogent justification.

## **D. Academic honesty, student honor code and professional guidelines**

All PhD students enrolled at Columbia are expected to adhere to the required standards for academic and scientific integrity. As part of the preparation of students for careers in public health, the Columbia Mailman School of Public Health (CPH) promotes the highest academic and professional standards. To clarify the school's expectation of professional and ethical conduct, including honesty, accuracy and integrity in academic and professional activities, the administration, faculty and students have adopted the [Honor Code and Professional Guidelines](#) to complement university policy. Students must agree to the Honor Code and Professional Guidelines and acknowledge that they are responsible for reading and understanding the materials listed on [Mailman's website](#), in addition to other applicable [University policies](#). GSAS has a slightly different [policy](#). PhD students must comply with both MSPH and GSAS. These policies are compatible with each other and do not represent any conflicts for the PhD students who must follow both.

## **Section V. Mentoring, Satisfactory Progress, and Getting Help**

### **1. Mentoring**

The PhD Committee places strong emphasis on appropriate mentoring by faculty and has endorsed mentoring guidelines to inform both faculty and PhD students of the department's expectations. This is a close mentorship relationship, and the department policy on mentoring and doctoral students, aligns with the [school's guidelines](#), offers advice and ground rules on developing this relationship and what students can expect. For further mentoring guidelines, please review Appendix 3. Mailman also has a [useful site](#) for faculty on the role of a mentor.

## 2. Annual review of progress

In order to monitor PhD student progress, troubleshoot potential problems, and allow for student input, all PhD students and their academic advisors are required to review their progress against the PhD Program Competencies and to complete an Annual Progress Report Form and submit an updated CV. This should include a thoughtful evaluation of the progress made in the previous year, including discussion of any barriers faced. The plan for the coming year should be detailed and measurable. The completed forms will be reviewed annually and included in students' folders. The Director of the PhD Program also reviews students' progress throughout their training, including annual reviews of student transcripts, grades on qualifying examinations, and progress on completing dissertations. In the event of questions or problems, students are asked to meet with a member of the PhD Committee and/or other appropriate faculty (e.g., their academic advisor, dissertation sponsor) to discuss progress and formulate a plan for moving forward. We encourage students to talk with their academic advisor on a regular basis in order to plan next steps and address problems before they become serious. Students may also request a meeting with the Director of PhD Program. Students are required to complete the review, discuss it with the academic advisor or sponsor and submit it to the Director of the PhD Program. A student who fails to submit this within the specified time frame is not in good standing in the university and will not be allowed to register for the following semester.

## 3. Satisfactory progress

The satisfactory progress of PhD students is assessed annually on the basis of academic performance, including the timely completion of all certifying and qualifying exams and dissertation requirements such as the development of the dissertation proposal, grades, and performance in any required teaching or research requirements.

## 4. Failure to make satisfactory progress

A PhD student who fails to maintain satisfactory progress will be alerted to their deficiencies, advised of the means to remedy them, and told the consequences of their failure to do so. A student who fails to maintain satisfactory progress after such a probationary period will have their candidacy terminated. In cases of egregious failure to achieve progress, a student may be dismissed from the degree program without a probationary period.

The GSAS regulations in this regard are found at [gsas.columbia.edu/content/satisfactory-academic-progress](https://gsas.columbia.edu/content/satisfactory-academic-progress): <https://gsas.columbia.edu/student-guide/policy-handbook/satisfactory-academic-progress>

## 5. Allowable time for completion of all requirements

The University stipulates that the PhD degree must be completed within at most 18 semesters (nine years) of full-time study; however, students are encouraged to complete their degree within five years.

Students who do not complete all requirements for the PhD degree by the end of the ninth year will no longer be considered PhD students and will be notified accordingly in writing. To request an extension of one or two semesters to the nine-year rule, a PhD student must submit their most recent progress report and indicate all the steps they will take, on a timetable, in order to complete the dissertation and defend it by the end of the extension. A sponsor's letter of support is required and should indicate support of the student's written plans and timetable and demonstrate that ongoing progress is being made. The request will be reviewed by the Director of the PhD Program and the PhD Steering Committee and, if appropriate, the Chair of the Department. If approved, the PhD student must deposit the dissertation by the end of the second semester extension or will no longer be a degree student at Columbia.

Only those semesters in which a PhD student has been registered are counted toward the time-to-degree limit— i.e., official leaves of absence granted by GSAS or MSPH are not counted. Students who have not registered continuously and who have not received an approved leave of absence must apply for and be accepted for reinstatement by both the department and the Mailman School of Public Health.

## 6. Available resources and getting help

### A. Departmental Contacts

PhD students remain in a doctoral program for a number of years and issues may arise which require assistance beyond the scope of the academic advisor or sponsor. Within the Department, a list of individuals to contact with questions include (in the contact order that questions should be directed): current PhD student representatives, the Director for Academic Programs, the Director of the PhD Program, the Vice Chair for Education, and the Chair of the Department. The names of these contacts can be found on the Epidemiology Department website [here](#) and [here](#).

### B. The Doctoral Student Coursework Page

The [Doctoral student courseworks page](#) was created to provide our graduate students a location to find all relevant documents and guides for the academic program as well as resources available to students. The courseworks page will be updated regularly to address the needs of the students.

### C. The Episummer@columbia Fund

The [episummer@columbia Fund](#) was created to provide our graduate students with an opportunity to access resources to help advance their educational agenda, using the revenue generated by the episummer@columbia.

The episummer@columbia fund is a funding source for Department students pursuing research and training opportunities beyond those covered by their standard tuition. Examples of potential uses for the episummer@columbia fund include but are not limited to:

- Travel for conferences; priority will be given to students who are presenting findings at professional meetings

- Purchase of e-books, datasets, or samples for a study
- Tuition for specific training needs, such as short courses, workshops, and training in software packages or lab techniques
- Research related items that will contribute to the students' research (for example, data collection)

The [episummer@columbia](mailto:episummer@columbia.edu) fund will not fund student tuition for their ongoing degree programs or living expenses. The [episummer@columbia](mailto:episummer@columbia.edu) fund will not fund student application fees to other degree programs.

Students seeking funding will complete a brief one-page application, providing the following information:

- Description, including, as applicable, date(s), location.
- Cost, including, as applicable, a detailed listing of each element. It is anticipated that applications will be for amounts less than \$2,500 for any one project. Lump sum costs without explanation will not be considered. Projects for higher amounts may be considered in exceptional circumstances.
- Rationale, as in, why this conference/dataset/class is vital to the student's education and research goals
- Brief description of other funding avenues the student has pursued prior to, or concomitantly with, seeking [episummer@columbia](mailto:episummer@columbia.edu) funds.
- A clear explanation of how all funds requested will be spent.

All things being equal, priority for funding will be given to students who demonstrate that they have exhausted all other available avenues of funding.

All applications should be submitted to the Director for Academic Programs.

A committee made up of the faculty from the epidemiology department will adjudicate applications.

There are three [episummer@columbia](mailto:episummer@columbia.edu) funding cycles: applications will be accepted on January 30, May 30, and September 30 each year. Applicants will be notified of the committee's decision within a month of the deadline. Applicants who are funded will be reimbursed, up to the full amount upon conclusion of the event or the training after applicant has submitted (a) all receipts and (b) a brief summary of how the [episummer@columbia](mailto:episummer@columbia.edu) Fund award was used.

## **D. Outside the department**

### *i. Office of Student Affairs (OSA)*

The [OSA](#) assists students as they navigate their academic programs. From orientation to graduation, the office monitors academic progress, assists with registration-related questions, develops co-curricular programming to enhance student life, and assists students who encounter any academic or personal obstacles along the way. OSA also maintains several funding streams for [student travel and other initiatives](#).

## *ii. [The Office of Disability Services \(ODS\)](#)*

The Department of Epidemiology works closely with the [Office of Disability Services \(ODS\)](#) to facilitate equal access for students, including coordination of reasonable accommodations and support services for students with disabilities. ODS works with students with all types of disabilities, including physical, learning, sensory, psychological, AD/HD, and chronic medical conditions. ODS also provides assistance to students with temporary injuries and illnesses. The Department of Epidemiology is committed to a campus culture that is sensitive and responsive to the needs of students. The department wishes to enable students with disabilities to fully realize their potential, recognizing their abilities and independence while supporting reasonable accommodation, maintaining equal access and preserving their confidentiality, in line with the spirit and provisions of the amended Americans with Disabilities Act.

To register with the Office of Disability Services, students must complete a Graduate Application for Accommodations and Services and submit documentation of their disability. The application and guidelines for disability documentation are available online. Students are encouraged to register with the Office of Disability Services at the time of their matriculation at Columbia University although they may do this later as needed.

Review of requests for accommodation and disability documentation may take two to three weeks to complete. Students are eligible to receive reasonable accommodations only when the entire registration process is complete. For more information, please contact the [Office of Disability Services](#). The liaison with Disability Services for the Mailman School of Public Health in Office of Student Affairs (OSA) is [Meurcie Zignoli](#) (email: [mz3047@cumc.columbia.edu](mailto:mz3047@cumc.columbia.edu)).

## *iii. [Center for Student Wellness](#)*

The purpose of the [Center for Student Wellness \(CSW\)](#) is to promote health and enhance learning by addressing health-related barriers to academic success. The Center offers a wide range of services for students in the Health Sciences including counseling and mental health consultation and treatment. The CSW assures confidentiality, does not report the names of visitors to the office, and will not act without permission except in cases of imminent serious risk to individual safety, or if required by law.

Located at 107 Bard Hall, the CSW is open Monday through Friday by appointment and also maintains walk-in hours. Services provided by the CSW are free to CUMC students. For more information, call them at 212.304.5564 (email [studentwellness@columbia.edu](mailto:studentwellness@columbia.edu)) or see their [website](#).

## *iv. [Ombudsman Office](#)*

The [Ombudsman Office](#) is another excellent source for thoughtful and confidential advice regarding challenges or conflicts involving academic issues. The office has drop in hours Wednesdays from 10:30am–2:30pm or an appointment can be made by emailing [ombuds@columbia.edu](mailto:ombuds@columbia.edu).

## *v. [Student Services for Gender-based and Sexual Misconduct](#)*

The Student Services for Gender-based and Sexual Misconduct is designed to support students facing inappropriate behavior based on sex and/or gender discrimination that may or may not be sexual in

nature. Their website contains information on resources and policy, and on how to get advice.

**APPENDICES** (for current appendices, see attachments).

Appendix 1: Annual progress report

Appendix 2: PhD Competency appraisal form

Appendix 3: Mentoring handbook