DREXEL UNIVERSITY
Dornsife
School of Public Health

PhD in Environmental and Occupational Health

Student Handbook

DREXEL UNIVERSITY
School of
Public Health
Department of Environmental and Occupational Health

Welcome to the Dornsife School of Public Health!

Congratulations on joining a new generation of environmental and occupational health professionals who believe that health is a human right and strive to eliminate health disparities and promote health in all policies. We are happy to welcome you into our community.

The Environmental and Occupational Health doctoral program will equip you with the skills to identify, examine and respond to environmental and occupational health challenges in our changing world. Our curriculum is rooted in hands-on research and analysis which will prepare you to assume leadership roles as public health scientists, researchers, and educators.

Here are some websites that will be most helpful as you browse this handbook:

Dornsife School of Public Health Student Dashboard: https://dsphstudent.info/
Drexel's Graduate College: https://drexel.edu/graduatecollege/about/overview/
Drexel Connect: https://connect.drexel.edu/

Sincerely,

Jane Clougherty, MSc, ScD
Professor and PhD Program Director
Environmental and Occupational Health

"This school of public health is founded on a commitment – a commitment to public health as social justice. We see health not as a privilege, but as a right."

Jonathan Mann, MD, MPH, Founding Dean - April 20, 1998

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Overview of the PhD in Environmental and Occupational Health Program

The Doctor of Philosophy (PhD) in Environmental and Occupational Health (EOH) will prepare students to examine and address critical problems in modern environmental and occupational health. The mission is to prepare researchers and scholars for careers in universities and other organizations, such as governmental agencies and private industries where environmental and occupational health research is conducted.

Environmental and occupational health has traditionally been defined as the exploration of the chemical, radiological, and biological factors in the community and workplace which impact health, via the core disciplines of exposure science, epidemiology, risk assessment, policy and toxicology. The Drexel EOH PhD program goes beyond the traditional to conceptualize the environment as both a social and physical entity, in the myriad pathways in which these environments impact health. The program emphasizes the examination of the workplace and community environments as critical settings that influence health, including psychosocial and behavioral hazards encountered within.

The PhD in EOH will equip students with the skills to identify, examine, and respond to important environmental and occupational health challenges, and to disseminate and translate findings. Students will benefit from engagement with the Department of Environmental and Occupational Health's multidisciplinary faculty and the Dornsife School of Public Health's emphasis on urban health and social justice. Students complete core Environmental and Occupational Health classes, with an opportunity to specialize in areas such as environmental epidemiology, injury prevention, occupational health and safety, industrial hygiene, or exposure assessment. This program trains students with the skills necessary to perform scientifically rigorous research to address pressing environmental and occupational health issues. Graduates of our program are well prepared to assume leadership roles as public health scientists, researchers, and educators.

Upon completion of the PhD program, students will be able to:

1. Evaluate basic principles related to environmental and occupational exposure assessment – including sources and characteristics of exposures, mechanisms, and methods for measuring and examining physical, chemical, biological, psychosocial and/or other exposures potentially related to human health.
2. Analyze relationships between exposures and human health, including variation in impacts by social, behavioral, psychosocial, and other susceptibility factors.
3. Critically evaluate and interpret published research in environmental and occupational health, from academic journals and other sources.
4. Formulate testable hypotheses about critical knowledge and evidence gaps in environmental and occupational health.
5. Develop and implement valid and reproducible study designs, including data collection strategies to test hypotheses using novel or current methods.
6. Apply appropriate and rigorous methods to analyze and interpret original data.
7. Communicate research results through scientific manuscripts, presentations, and other forms to both scientific and lay audiences.
8. Assess risks associated with physical, chemical, psychosocial or other exposures in environmental or occupational settings, and identify appropriate policies and other interventions for preventing or reducing these risks.

Graduate College Handbook & Doctoral Program Handbook Addendum

Doctoral students are responsible for understanding the policies and procedures of (1) Drexel University, (2) the Dornsife School of Public Health, and (3) the department of Environmental and Occupational Health.

1. Drexel policies are detailed in the Graduate College Handbook. Drexel policies typically take precedence, but there are instances where the Drexel policy defers to the department. https://drexel.edu/graduatecollege/forms-policies/policies-procedures-guidelines/doctoral-handbook/
2. Dornsife policies are found in the Dornsife Doctoral Program Handbook Addendum, which is intended as a supplement to this departmental handbook. It is updated annually by Dornsife's Office of Education. https://docs.google.com/document/d/1twImwxz2Lz-xn3prq5Batxt651j_bIMOdv4pFxU_BCs/edit
3. This EOH PhD handbook is the handbook specific to the EOH PhD program within the Department of Environmental and Occupational Health.

This EOH PhD handbook at the time of the student's matriculation typically applies throughout their entire degree. However, the Dornsife School of Public Health and the University reserves the right, at any time, to make changes to bylaws, rules, regulations, policies and procedures as may be necessary in the interest of the University, the Dornsife School of Public Health and its students. Such changes may, by necessity, take precedence over this handbook.

Program Forms (E-Forms)

The Graduate College is the repository for all official doctoral student files and tracks the academic milestones of all doctoral students through a series of required electronic forms. These "E-Forms" are submitted sequentially to track doctoral students' progress, and each of these forms represents a step toward candidacy and graduation. Because this is a university-wide system, some of the forms may seem redundant for our program and some of the terminology is different from Dornsife terminology. Detailed information can be found in the university's E-Forms Guide, which outlines what must be tracked and reported and who is responsible for providing and submitting information. It is recommended to always check the E-Forms Guide for the most updated instructions prior to completing a tab. Connection to the desktop VPN is required to access the system off campus.

E-Forms Guide: See most recent E-Forms Guide under PhD Program Electronic E Forms on the Graduate Forms page here: https://drexel.edu/graduatecollege/forms-policies/forms/

E-Forms "Getting Started Video for Students" can be found on the Graduate Forms page here: https://drexel.edu/graduatecollege/forms-policies/forms/

Mentoring, Advising and Registration

Faculty Mentor (Supervising Professor)

Matriculating students will be assigned a faculty mentor upon admission to the program. The student's faculty mentor serves as the student's supervising professor, helps the student to formulate an academic plan and guides their scholarly and research efforts. The faculty mentor typically becomes the student's dissertation committee chair.

To ensure timely and correct completion of the curriculum, students should consult regularly with their faculty mentor. Faculty mentors serve to provide career advice, are well-connected with public health resources locally, nationally, and internationally, and are excellent sounding boards for advice on educational and professional matters. The faculty mentor will usually remain with the student and serve as the student's supervising professor for their dissertation work. However, students are permitted to change mentors. Request for a mentor change should be made to the PhD Program Director. If a change approved by the PhD Program Director is made, the student must submit the change through the Supervisor Appointment E-Form tab. Instructions are in the **E Forms Guide** under "Supervisor Appointment."

E-Form: Supervisor Appointment
Student: Students complete this form to document their faculty mentor in the system.

Graduate Advisor (Academic Advisor)

Students will also be assigned an advisor to assist with their academic record. While Dornsife uses the terminology "academic advisor," Drexel's Graduate College refers to this individual as the "graduate advisor." These terms are used interchangeably. Academic advisors are dedicated to helping the student with informed decision-making. Academic advisors can help you plan your schedule, register for courses, add/drop/withdraw from a class, and review your progress toward graduation. Your academic advisor can also answer questions about how to complete E-Forms.

Course Registration

Students will register themselves via Drexel One. Students must follow their plan of study and work with their faculty mentor to select all electives. Students are responsible for ensuring they remain on track for graduation.

Helpful links:
Drexel One: **https://one.drexel.edu/cp/home/displaylogin**

Course registration process: **https://drexel.edu/drexelcentral/registration/courses/**

Information about how to self-register: **https://drexel.edu/drexelcentral/registration/courses/adding-dropping/**

Academic Calendars: **https://drexel.edu/provost/policies-calendars/academic-calendars/**

Term Master Schedule: **https://termmasterschedule.drexel.edu/webtms_du/**

Curriculum

Degree Requirements

Completion of the PhD in Environmental and Occupational Health will require:

1. A minimum of 90 quarter credit hours of course work beyond the bachelor's degree or a minimum of 45 quarter credit hours of course work beyond the master's degree;
2. A minimum cumulative grade point average of 3.3;
3. Passing the doctoral comprehensive examination;
4. Passing the proposal defense;
5. Completing a dissertation of publishable quality;
6. Passing the final defense.

A student in the PhD degree program shall have seven calendar years from the date of initial registration to complete and successfully defend a dissertation. Exceptions may be made for extenuating circumstances and students can petition for additional time if needed, though it is not guaranteed. All scholarships, stipends, and tuition remission offers are reviewed annually and are not guaranteed.

Course Work

All entering students are expected to have already completed introductory level epidemiology and biostatistics courses or have sufficient experience in these areas. Entering students without this prior knowledge will be required to either enroll in additional credits during the academic year or enroll in pre-approved preparatory work prior to matriculating into the program.

Post-Baccalaureate Requirements and Post-Master's Requirements

All students must complete nine Departmental Required PhD Courses and at least nine electives, selected with faculty mentor guidance and approval. Remaining credits come from Dissertation Guidance credits. PhD students are required to complete the TA Orientation and Preparation Course and the Responsible Conduct of Research Course. PBHL 501 Introduction to Public Health is a required prerequisite course for students who do not have a degree from a CEPH-accredited school.

> For post-master's students: Students who have previously completed required courses at Drexel University (or their approved equivalents) as part of their master's program may be waived from some required courses. For non-Drexel students who have completed their master's elsewhere, all courses will be evaluated to determine equivalency to the required courses. Students may be asked to provide evidence of such material to determine equivalency. Students who are approved to waive out of required classes will be provided with the course materials to prepare for the comprehensive exam.
>
> For post-baccalaureate students, students must complete a minimum of 90.0 credits.

Residency Requirement

To be eligible for stipends, tuition remission or any other type of financial support from the school, department, or respective centers, students must be enrolled full-time. Drexel defines full-time as being registered for a minimum of 9 credits each term (Fall, Winter, Spring).

Plan of Study

Students are expected to be actively involved in planning, implementing and evaluating their program of study. It is strongly recommended that students meet regularly with their faculty mentor to determine their goals and objectives so that their course work, research and dissertation proceed at a reasonable pace. An initial plan of study is developed by the student with their faculty mentor prior to matriculation. Students are required to discuss proposed changes to their plan of study with their faculty mentor.

Process:

- Academic Program Coordinator obtains necessary syllabi from incoming students, coordinates with Epidemiology and Biostatistics professors to determine placement, and drafts initial plan of study to serve as a worksheet for the student and mentor.
- Mentor reaches out to the student during the quarter before matriculation and works with the student to determine which courses the student must take, and which may be waived. The decision to waive courses is done in consultation with the PhD Program Director with consideration of several factors including time since course completion, grade in course, and current comfort level with material.
    - Mentor is not required to determine exact quarters for each class, but this will likely be part of the discussion based on necessary prerequisites and the mentor's experience with the PhD program.
- The Program Director informally approves all course decisions before the academic advisor reviews the plan.
    - Formal approval is through E-Forms, but this is not due until later during the student's first year.
- After the Program Director approves the course decisions, the academic advisor will work with the student.
    - Advisor will help finalize the detailed plan of study that incorporates the mentor's decisions and recommendations as well as specific timing.
    - Advisor will also help prepare students for the registration process.

E-Form: Plan of Study tab, Supporting Documents tab
Student: While the preparation of the plan of study typically occurs before a doctoral student starts courses, this tab is completed during the first year. For students who start in the fall, this tab must be completed by the last day of classes of the spring quarter. Answer "no" to the question, "Does your professional doctorate program require a candidacy exam." Upload the plan of study which was developed with your faculty mentor into the Supporting Documents tab.

The following table lays out an example sequence of courses falling over a four-year period. *This table should be viewed only as a guideline.* Each student must meet regularly with their faculty mentor to implement a plan of study best suiting their needs. Students are required to consult with their faculty mentor on all elective selections. Elective coursework must be at the 500-level or above and be aligned with the student's research interests and dissertation focus. For the most up-to-date plan of study and description of required courses, please refer to the course catalog at:
https://catalog.drexel.edu/graduate/schoolofpublichealth/eohphd/index.html#sampleplanofstudytext

Environmental and Occupational Health PhD Program – EXAMPLE four-year plan

YEAR	FALL	WINTER	SPRING
1	EPI 560: Intermediate Epidemiology 3 credits	EOH 810: Environmental and Occupational Toxicology 3 credits	EOH 805: Evidence Evaluation for Identification of Environmental Hazards 3 credits
	EOH 825: Occupational and Environmental Epidemiology 3 credits	EOH 830: Seminar in Environmental Epidemiology 3 credits	EOH 812: Environmental Exposure Science 3 credits
	Elective 3 credits	Elective 3 credits	BST 560: Intermediate Biostatistics I 3 credits
	GRAD T580 TA Orientation and Prep 1 credit	Responsible Conduct of Research 0 credits	

YEAR	FALL	WINTER	SPRING
2	Elective 3 credits	EOH 800: Professional Development (offered every other year) 3 credits	EOH 815: Environmental and Occupational Health Policy 3 credits
	Elective 3 credits	Elective 3 credits	Elective 3 credits
	Elective 3 credits	Elective 3 credits	Elective 3 credits

YEAR	FALL	WINTER	SPRING
3	EOH 997: Dissertation Guidance 9 credits	EOH 997: Dissertation Guidance 9 credits	EOH 997: Dissertation Guidance 9 credits

YEAR	FALL	WINTER	SPRING
4	EOH 997: Dissertation Guidance 9 credits	EOH 997: Dissertation Guidance 9 credits	EOH 997: Dissertation Guidance 9 credits

Sample timeline for program milestones:

Comprehensive Exam: End of year 1
Proposal Defense: End of year 2 – End of year 3
Dissertation Defense: End of year 3 – End of year 5

Doctoral Required Courses

EOH 800: Professional Development
This course is a professional development seminar for doctoral students and candidates in the environmental and occupational health program. Students will develop the presentation and professional skills necessary to enter the academic and professional job market.

EOH 805: Evidence Evaluation for Identification of Environmental Hazards
The hazard identification step of environmental risk assessment is meant to answer the question, "Is exposure X a cause of human health outcome Y?" Answering this question involves evaluation of a body of research, often including conflicting results. In this course, students will discuss and practice evidence evaluation, using different types of evidence (human epidemiology, animal experiments, mechanistic data), and various methods for evidence synthesis (systematic review, meta-analysis) and evaluation (e.g., risk-of-bias tools). Determination of an overall weight-of-evidence for a particular hazard will also be discussed. Through case studies, students will consider strengths and limitations of evidence, the types of biases that may be present, and how differences in interpretation may occur.

EOH 810: Environmental and Occupational Toxicology
This course will focus on the applications of environmental and occupation health (EOH) and toxicology, along with the necessary fundamentals of toxicology as a science. Major classes of toxicants and the relevant physiology of toxicity will be covered. Students will learn the challenges and opportunities in toxicology and how toxicology interacts with other disciplines at the population and individual level. Traditional topics and approaches to EOH (water and air quality, occupational health, industrial hygiene and injury prevention) will be integrated with toxicological approaches.

EOH 812: Environmental Exposure Science
This course provides students with an overview of methods for measuring and evaluating both chemical and non-chemical environmental exposures. Particular emphasis will be placed on exposure assessment methods applicable to environmental epidemiology studies. Students become familiar with exposure science study design and commonly used methods for monitoring and modeling pollution exposures in environmental settings, through participation in classroom exercises, lectures, and group work.

EOH 815: Environmental and Occupational Health Policy
This course provides an overview of the origins and development of environmental and occupational health policies, primarily in the United States. It utilizes an evidenced-based framework to assess the effectiveness of these policies within a context of a political climate towards public health. There is a focus is on the role of economics, legal/regulatory processes, and ethical issues. Cross-cultural and international differences will be explored.

EOH 825: Occupational and Environmental Epidemiology
Students will develop an understanding of occupational and environmental epidemiologic methods. Particular emphasis will be placed on the critical analysis of published occupational epidemiologic studies.

Students will gain an understanding of the most appropriate methods for assessing exposure/disease relationships for several occupational and environmental exposures and diseases.

EOH 830: Seminar in Environmental Epidemiology
This course is aimed at graduate students undertaking independent research in preparation for thesis defense or to aid in completion of the Integrated Learning Experience (ILE) requirement of MPH degrees. Topics may include research methodologies; research ethics; the results of research and issues in specific areas relevant to students' research. Emphasis will be placed on engaging with current literature in occupational and environmental epidemiology and exposure assessment.
Prerequisite Requirement: B+ in either EOH 825 or EPI 560.

BST 560: Intermediate Biostatistics I
This course focuses on an overview of the linear modeling methods most commonly used in epidemiological and public health studies. Models include simple/multivariate linear regression, analysis of variance, logistic/conditional regression, Poisson regression and models for survival data. Focus is on implementing models and interpreting results.
Prerequisite Requirement: B in BST 571 and BST 555 or equivalent courses from a graduate program.

EPI 560: Intermediate Epidemiology
This course expands on basic methods used in epidemiologic thinking and research - with a focus on observational studies of disease risk factors. Topics covered include basic principles of causal inference; observational study designs; bias; confounding; effect modification; stratified analysis; and the epidemiologic approach to multivariable modeling.
Prerequisite Requirement: B in BST 571 and EPI 570 or equivalent courses from a graduate program.

EOH 997: Dissertation Guidance in Environmental and Occupational Health
Directed guidance of dissertation research, preparation for presenting dissertation research to colleagues at the dissertation seminar and preparation for the final defense.

PBHL 501: Introduction to Public Health
The purpose of this course is to provide a broad introduction to public health, as well as an understanding about how specialized health research contributes to achieving the goals of public health.
*PBHL 501 is a required prerequisite course for students who do not have a degree from a CEPH accredited school.

Teaching Assistant Orientation and Preparation
Students who are required to TA are also required to take the TA Orientation and Prep course their first Fall. https://drexel.edu/graduatecollege/professional-development/TA-prep-course/.

Responsible Conduct of Research
This required course provides an overview of key elements of research methods and ethics ensuring Drexel students have a solid foundation of these elements in compliance with federal funding agencies. Topics covered through the course include data fabrication, data falsification and plagiarism, responsible authorship, publication and mentorship practices, conflicts of interest, data management, and the use of human and animal subjects in research. https://drexel.edu/graduatecollege/professional-development/rcr/

Electives

Students are required to consult with their faculty mentor on all elective selections. Elective coursework must be at the 500-level or above and be aligned with the student's research interests and dissertation focus.

When selecting electives, please pay attention to the following:

1. Your electives must be at the 500-level or above to count towards your degree. Anything below 500 is an undergraduate class and will not count towards your degree.
2. Look for prerequisite requirements and restrictions. Prerequisites and restrictions can be waived on a case-by-case basis with approval from the course instructor. Please contact the course instructor for permission to waive prerequisites.
3. Look at the day/time the elective course is offered. You will not be able to take an elective course if it conflicts with your required classes.

Comprehensive Examination

The PhD Comprehensive Examination is a three-section exam taken over the period of one and a half weeks to test the attainment and application of competencies from required coursework. The exam starts at the end of June, after the end of the spring quarter. In Section One, students will be given one week to complete a take-home exam, accessed and submitted via Blackboard. Sections Two and Three will be written exams taken at home on Blackboard over two consecutive days. Students typically take the exam following completion of the first year of course work. Students must be in good academic standing and must have successfully completed or waived the following courses before sitting for the comprehensive exam: EOH 805, EOH 810, EOH 812, EOH 825, EOH 830, EPI 560, and BST 560. The Comprehensive Exam is administered by the PhD Program Director. The core faculty are responsible for creating exam questions, which are vetted by the PhD Program Director.

Section	Class Content Examined
Section 1: Evidence Evaluation	EOH 805: Evidence Evaluation for Identification of Environmental Hazards
Section 2 Part A: Exposure Science	EOH 812: Environmental Exposure Science
Section 2 Part B: Toxicology	EOH 810: Environmental and Occupational Toxicology
Section 3: Epidemiology	EOH 825: Occupational and Environmental Epidemiology EOH 830: Seminar in Environmental Epidemiology

Section One

The first section is a take-home written exam where students will evaluate a body of evidence to address a particular EOH scientific question. Students will assess quality, risk-of-bias, and relevance of the individual studies, and will integrate evidence across multiple studies to develop a conclusion about the weight of evidence for a causal association. The written paper will include qualitative and quantitative synthesis of the evidence, confidence in the summarized association, and rationale and justification for the evidence conclusion. Students will be provided with the scientific question and the body of evidence (selected articles) and will have one week to complete the evidence evaluation, with the paper due the day before the second section of the exam. This portion is open-book, open-note. Students are required to complete the exam individually and may not discuss the exam or collaborate with other students, colleagues, or others during the exam.

Section Two

The second section is a written exam focused on concepts from Exposure Science and Toxicology. Students will be given 4 hours to complete this section. This portion is open-book, open-note and taken via Blackboard. This section has two parts:

1. Part A: Exposure Science
2. Part B: Toxicology

Section Three

In the third section, students will complete the results and discussion section of a half-written epidemiology paper. This section is closed-book, closed-note and will be taken via Blackboard. Students will be given the half-written paper the day of the exam and be expected to complete the results and discussion section of the paper with a 2,000-word limit. Students will be required to create a hand-sketched graph of the most important results from the tables. Students will be given 4 hours to complete this section.

Grading

The core faculty are responsible for grading their section of the exam, with oversight from the PhD Program Director. Students will receive a total of four individual grades from the four parts: one grade from Section One, two grades from Section Two (Parts A & B), and one grade from Section Three. Each part will be graded on a Pass/Fail basis. Students will receive the graded exam within one month.

Students must ultimately pass all four parts to register for the subsequent academic term and remain in the PhD program. Students must pass three out of four parts to be eligible for remediation and to retake the exam. Failure of two or more parts will result in dismissal from the program.

In the case that a student fails one part, they will be required to undergo remediation and retake the part they failed. Students will meet with the course instructor and their mentor to develop a plan to address part of the exam graded as fail. Students must retake the exam within 30 days of receiving their exam results. Students will only be allowed to retake the comprehensive exam one time. Any student who does not pass the examination after one retake will be dismissed from the program. Exemptions from the dismissal policy can be granted under extenuating circumstances.

E-Forms: There is no E-Form associated with the comprehensive exams.

Comprehensive Examination Grade Appeals

The grade appeal process provides recourse if a student believes that an inaccurate section grade has been awarded, because the grade does not align with criteria established in the course materials or test instructions.

Appeal Process

- To appeal a section grade, the student should submit their concerns in writing to the PhD Program Director and course instructor within three business days of receiving their section grade.
- Course instructor will respond to the student and PhD Program Director in writing within three business days, with written justification of the grade assigned.
- The test section and instructor's justification will be reviewed by the Program Director, in consultation with the PhD Program Committee and Department Chair, within 10 business days.
- When a decision has been reached, the Program Director will respond to the student and course instructor in writing.
- If an appeal is made on the first attempt, the student should meanwhile be preparing to re-take that section, if necessary. If an appeal is made for a failing grade on a second attempt, and the appeal proves unsuccessful, the student will be dismissed from the program.

Doctoral Annual Review

Each summer, due by July 15th, students and their mentors will review the previous year's progress and establish goals for the upcoming year. These goals will reflect the student's academic and research-related needs as well as the department's expectations for their timely progression through the program. The "Student Yearly Progress Report" form can be found at the end of this document as Appendix C.

E-Forms: Supporting Documents, Annual Review Results
Student: Once the student, mentor and PhD Program Director have signed the yearly progress report, the student must upload the signed form into the Supporting Documents tab.
Faculty mentors must also complete the Annual Review Results tab.

Dissertation Process

Dissertation Proposal

The doctoral thesis is intended to present a unique and substantive intellectual contribution to one's field. After passing the comprehensive examination, the student works to develop a dissertation proposal. All students must complete an original investigation in an area of research presented in the form of a dissertation based on the student's own work, worthy of publication and acceptable to the student's committee. The objective of the dissertation proposal is to provide the student, mentor, and committee with a formal plan and foundation for executing the project and writing the dissertation. In addition, writing the proposal will help the student to become acquainted with relevant substantive and methodologic literature, and provide them with an opportunity to practice preparing a proposal in a format that is commonly used for NIH grants. Sections of the dissertation proposal, such as the background and significance, might be used in parts of the final dissertation document.

The proposal will detail an environmental and occupational health research project of high scientific merit with substantive downstream public health impact. It is developed with the faculty mentor but may also involve consultation with other interested faculty. The dissertation proposal includes an overview of the central theme, a review of the literature (including gaps), and justification for an overview of the empirical studies proposed under the theme.

Criteria for an Acceptable Dissertation and Preparation of the Proposal

In a successful dissertation project, the student should demonstrate mastery of a chosen research topic area, including application of that knowledge by conducting original research on the topic. This requires that the student takes "ownership" of the dissertation work, demonstrated through initiation of the project, oversight of data collection and/or data management, data analysis, and research result interpretation. This work is largely completed by the student but involves active guidance from the dissertation committee.

Examples of original research include, but are not limited to:

- Novel approaches/use of secondary data - the student conducts unique research of a secondary data (already collected) resource, such as by addressing a new scientific question (not already analyzed in the data) or applying a new analytic technique.

- Primary data collection – the student collects new data to address a research question in a dissertation project, or incorporates new data (with appropriate methods) that should be added to the methods of an existing research study.

- Development of a new research protocol or way of collecting or analyzing data, with appropriate assessment of the performance and validity of the new method(s).

See Appendix A: Dissertation Proposal Format Guide for formatting requirements.

Dissertation Committee

After developing the proposal concept, the student appoints a committee of at least five members in accordance with the guidelines below and in consultation with the student's faculty mentor.

The Committee must consist of at least five members (including the committee chair) and must include:

- 3 tenured, tenure-track or non-tenure-track Drexel faculty members within the student's department and/or subject area, one of whom will typically also serve as the chair or co-chair
- 2 members from outside the student's subject area. This may include faculty outside the department as well as full-time, non-tenure track or research faculty (in some instances, one of these full-time faculty members may serve as a co-chair)
- 1 member outside the department, preferably from outside Drexel

Note that these criteria may overlap as one individual may fulfill more than one criterion. The committee must still consist of at least five members.

If approved by the Department or associate dean of the student's college/school, someone from outside of the University may serve on the committee as the co-chair. It is important for students to consult with their supervising faculty member, or the program department head, to understand the required committee composition.

Faculty mentors are responsible for working with the student to select appropriate members of the committee who are knowledgeable in the general area of research of the student and who meet the composition requirements detailed above.

Students should meet with their faculty mentors and committee regularly while conducting their research.

E-Form: Advisory Committee tab
Student: Prior to the Proposal Defense, the student must enter the information about their committee members and send the request for each member to approve their role on the committee.
Committee members: will receive a link to this tab initiated by the student and must confirm their role on the dissertation committee.

Note: Do not enter information into the Candidacy Committee tab. Our program does not use that tab.

Proposal Defense

The proposal defense is an oral examination conducted by the dissertation committee which assesses the student's ability and preparation to execute the proposed research. The exam is therefore not limited to the proposal, but the proposal provides the context for this exam. The exam will begin with a closed presentation by the student about their planned research. Following the student's presentation, the committee members will ask questions. Immediately following the examination, the committee will meet privately to evaluate the success or failure of the student by a closed ballot. The closed ballot will be administered prior to the discussion of the candidate's performance.

Students should prepare a presentation that mirrors the content of the proposal. This presentation will not be interrupted and will be limited to approximately 30 minutes to leave time for questioning. It is recommended that the students include slide numbers on each slide to increase efficiency during questioning.

Questions posed by the committee members during the oral examination will focus on the proposal as well as content knowledge that is considered central to the student's discipline. In general, through both the written report and the oral examination, students will be expected to demonstrate:

- a broad command of existing knowledge that is central to the student's research;
- the ability to think critically about research questions in their field;
- the ability to identify existing gaps in knowledge and how their proposed research fills those gaps;
- understanding of relevant research methods, including key assumptions and technical considerations such as analytical and statistical methods.

Responsibilities of the student:

- The student is responsible for arranging a time during which all committee members must be present, via zoom or in-person. In-person is preferred, but out of town committee members may attend via zoom if necessary.
- The student is responsible for scheduling a day, time, and room reservation (with Departmental support) for the proposal defense presentation. Allow at least 2 hours when booking the room.
- The student is responsible for sharing the dissertation proposal document with committee members at least two weeks prior to the defense.

Responsibilities of the faculty mentor and committee members:

- The faculty mentor should work with the student to make sure the student is preparing appropriately for the proposal defense. It is the responsibility of the faculty mentor to chair the proposal defense and ensure a fair and balanced examination while maintaining the high standards of the program. The faculty mentor should ensure that every committee member can ask questions during the proposal defense and that the proposal defense remains an examination of the student as opposed to a discussion of the research. During the proposal defense, the faculty mentor should maintain the order of questioning. Following the proposal defense, the faculty mentor should summarize the recommendations of the committee and ensure that the student understands them.
- Committee members are responsible for thoroughly reviewing the student's proposal and for preparing questions related to the proposed research as well as questions of facts and concepts that are pertinent to the student's proposed research.

Proposal defense meeting logistics:

- Approximately 30 minutes: the student presents their research proposal.
- 45 minutes: each committee member takes approximately 10 minutes to ask questions of the student. Questions may rotate among committee members.
- 10-15 minutes: the student is dismissed while the committee deliberates.
- When a consensus decision is reached, the student is asked to return. The committee chair informs the student of the committee's decision and summarizes the committee's recommendations. These recommendations are entered into the Diss/Project Proposal tab.

The options for evaluating a student include: (1) Unconditional Pass - all members vote "unconditional pass" on the first ballot; (2) Conditional Pass - further evidence of qualifications is necessary, the nature of the required condition(s) decided by consensus; and (3) Failure - a majority of the committee decides that the student has failed the examination. If the student fails the exam, the committee may recommend a reexamination. If the student is permitted a reexamination, they must be reexamined within six months, normally by the same committee.

After the proposal defense is passed, students are considered to have attained doctoral candidate status. The minimum number of credits per term that a student who has reached candidate status and who has already completed their required one-year in residency (i.e., has previously registered for three consecutive terms at least 9 credits/term) must register for is 1 credit for at least 3 terms each academic year until they complete their degree. If a student is fully funded, they must register for at least 9 credits per quarter. Students can register for coursework or dissertation research credits. Doctoral candidates need to remain mindful of the total credits needed to complete the program.

E-Form: Diss/Project Proposal tab
Student: After the Advisory Committee tab is completed and after the committee members have approved their roles, the student must enter date, time, location and title, then click "save and send" to send a notification to all committee members.
Committee Members: The committee chair must enter the outcome of the proposal defense into this tab. The committee chair must click "Save Decision & Send Notification." Each committee member will then receive a notification asking if they agree or dissent and must answer this using the agree/disagree boxes by their name. Drexel-based committee members have the option of entering comments or uploading a document of comments. These comments will be available to the student.

Conducting Research and Writing Dissertation

Students should meet with their faculty mentor and dissertation committee members regularly while conducting their research to develop and agree on a timeline and expectations regarding meeting frequency, expectations and process for sharing working changes in research plan, and to share results and drafts. Doctoral candidates must schedule a meeting with their dissertation committee at least once per year to review progress.

The student should use the Drexel University dissertation manual in conjunction with Appendix B Dissertation Format Guide of this handbook. The manual can be found here:
https://drexel.edu/graduatecollege/academics/thesis-and-dissertation/

The doctoral student and faculty mentor are responsible for conforming to the university format requirements.

Reviewing Dissertation

After the faculty mentor (who is normally also the dissertation committee chair) has reviewed and approved the complete dissertation draft, the student will give the complete draft to the other dissertation committee members and incorporate suggestions made. All dissertation committee members must agree that the dissertation meets the scholarly expectation as a noteworthy contribution to knowledge before the scheduled defense can be held.

E-Form: Graduation Requirements (due one full quarter before the Final Defense)
See E-Forms Guide for detailed information

Final Defense

The student's dissertation advisory committee serves as the dissertation defense committee. The dissertation advisory committee chair will normally be the chair of the final defense examination. The final defense will begin with a 35-45 minute presentation by the student about the research. Following the student's presentation, the dissertation advisory committee members will ask questions to assess the student's judgment and scholarship. Audience members will then be invited to ask questions. Immediately following the questions, the committee will meet privately to evaluate the success or failure of the candidate. The committee will discuss the candidate's performance and take an open vote. The range of decisions following the defense is the same as those for the proposal defense examination: (1) Unconditional Pass - all members vote "unconditional pass" on the first ballot; (2) Conditional Pass - the required condition(s) decided by consensus; and (3) Failure - a majority of the committee decides that the student has failed the defense. If the student fails the final defense, the committee may recommend a reexamination. If the student is permitted a reexamination, they must be reexamined within 6 months. The student will be informed of the committee's decision immediately following the vote. The student must pass the defense either the first or second time as only two attempts are permitted.

E-Form: Diss/Project Oral Defense tab
Student: At least four weeks prior to the dissertation defense, the student must enter the date and time into this tab.
Committee Members: Following the dissertation defense, the committee chair must enter the outcome of the proposal into this tab as well. The committee chair must click "Save Decision & Send Notification." Each committee member will then receive a notification asking if they agree or dissent and must answer this using the agree/disagree boxes by their name. Drexel-based committee members have the option of

entering comments or uploading a document of comments. These comments will be available to the student.

Recommended Timeline for Dissertation Defense

Activity	Due By
Candidate should be sharing dissertation chapters with the committee as they are developed, and inviting and incorporating feedback, prior to the start of this dissertation defense timeline	
Candidate will send a complete dissertation draft to the chair.	Six weeks prior to scheduled defense
Candidate will request for committee to "hold" a date.	Six weeks prior to scheduled defense
Candidate incorporates suggestions from chair and circulates final draft to committee with chair's approval.	Four weeks prior to scheduled defense
Candidate confirms final defense day/time/location.	Four weeks prior to scheduled defense
Committee provides comments to the candidate and indicates any major concerns which may interfere with a successful defense to committee chair.	One to two weeks prior to scheduled defense
Candidate applies for degree completion.	See university deadlines: http://drexel.edu/drexelcentral/graduation/information/applying-for-degree/
Final defense	
Final defense results	Recorded in E-Forms within two days of defense
Final dissertation submission deadline – after all revisions required by the committee have been made.	Within two weeks of final defense date

Final Draft of Dissertation

The final draft of the dissertation should not be prepared until the student has passed the final defense. It is the norm that some modifications to the dissertation may be required by the committee as a result of the defense. The chair will be responsible for ensuring that any changes recommended by the committee are carried out. Other committee members may make final approval of the dissertation contingent upon their review and approval of the revisions.

E-Form: Submit Diss/Project tab
See **E-Forms Guide** for detailed information

Academic Policies

All relevant academic policies for doctoral students can be accessed from these links:
Dornsife Academic Policies: https://dsphstudent.info/academics/policies/

Graduate College Policies: https://drexel.edu/graduatecollege/forms-policies/policies-procedures-guidelines/

FERPA Policy: https://drexel.edu/registrar/records-calendars/ferpa/

Grades

There is an expectation of a steady increase in each student's level of performance throughout the program, with a concomitant expectation of steadily increasing ability to integrate and apply the critical elements from all preceding classes. Students are graded on their performance in all aspects of the curriculum. To receive academic credit, students must receive a C or higher in each graduate-level course taken. Course grades below a C will not count towards the degree. Additionally, a student must maintain a cumulative GPA of a 3.3 to graduate.

If a student receives a grade below C in any class, they must retake that course. The course remains on their transcript and is averaged in with all other courses in the GPA calculation. Graduate students may repeat up to a total of two courses. Students may petition that only the highest grade be counted in the cumulative grade point average up to a maximum of two separate occurrences. This is limited to one occurrence for each specific course, for courses in which they received a grade of B- or below and as such that the lower letter grade is removed in GPA calculations. All occurrences of the course along with associated grades will remain in the student's academic record as well as on the official transcript. Students will not receive additional credit for repeating a course. Students must discuss this with their faculty mentors and meet with their academic advisor to complete the necessary paperwork.

Graduate student grades policy:
https://drexel.edu/provost/policies-calendars/policies/grades-policy-for-graduate-students/

Course Evaluation

Course evaluations are sent to students toward the end of every quarter through AEFIS and can be accessed through the "AEFIS" hyperlink in Drexel One. It is important that students complete these evaluations so that faculty and administrators in the Dornsife School of Public Health can have a better understanding of students' educational experiences. These evaluations take about 10-15 minutes to complete, and the process is completely anonymous. The course evaluations are a critical component to Dornsife's program evaluation process and the overall quality improvement of the courses. Student feedback is essential if we wish to understand the strengths and address the limitations of the content and instruction of our Public Health courses.

Adding/Dropping/Withdrawing

https://drexel.edu/graduatecollege/forms-policies/policies-procedures-guidelines/course-add-drop-withdrawal/#:~:text=Course%20Add%2FDrop%2FWithdrawal&text=*If%20a%20course%20add%20or,at%20acw334%40drexel.edu.

Incompletes

At the sole discretion of the instructor a grade of Incomplete (INC) may be assigned to a course where, 1) the instructor judges the student to have a legitimate reason to request the Incomplete grade, 2) the student has successfully completed more than 70% of course work at the time of request, and 3) the student has the ability to pass the course upon successful completion of the course requirements. Incomplete grades may not exceed two subsequent quarters. The student and instructor must complete a formal agreement stipulating all work to be completed and the deadline for such completion. A term grade of "F" will be assigned if contractually assigned work is not completed by the agreed upon deadline. A student with two or more incomplete grades will not be allowed to register for additional courses without permission from the Program Director.

PhD Vacation Policy

https://drexel.edu/provost/policies/vacation-policy-for-phd-and-doclevel-students/

Academic Integrity Policy

https://drexel.edu/studentlife/community-standards/code-of-conduct/academic-integrity-policy

Any violations of the above will be dealt with utilizing the procedures outlined at https://drexel.edu/studentlife/community-standards/code-of-conduct/academic-integrity-policy/conduct-process

Turnitin: Some courses may use Turnitin to submit written assignments to identify plagiarism. Faculty can also use Turnitin at their discretion to evaluate any student writing submitted, including dissertation proposals and dissertations.

Leave of Absence

Doctoral students who find it necessary to take a leave of absence from the University should seek advice from their academic advisor and faculty mentor. On recommendation of the student's faculty mentor and the PhD program director, a student may take a leave of absence for up to a maximum of one year for reasons of military service, family care, serious illness or another reason deemed adequate for interrupting graduate studies. Students will work with their academic advisor to complete the necessary paperwork. A leave of absence does not extend the time limits allowed for completion of a degree.
https://drexel.edu/graduatecollege/forms-policies/policies-procedures-guidelines/leave-of-absence/

Students who are receiving stipends will have these suspended during their leaves.

Students on F-1 or J-1 visas must consult with the Office of International Student and Scholar Services before requesting leave.

Maintenance of Matriculation

All matriculated Dornsife School of Public Health students are required to be registered Fall, Winter, and Spring quarters to continue to be degree candidates, unless they have requested and have received permission for a formal leave of absence. Summer registration is not required. If needed, summer tuition may be covered with the written approval of the PhD Program Director and faculty mentor prior to the start of the term. Informal leave of absence arrangements are not acceptable and will not be honored retroactively.

Matriculated students who fail to obtain a leave of absence or register for a quarter will be subject to termination of their matriculated status and may be administratively withdrawn and dropped from the rolls of the Dornsife School of Public Health. Students who have been administratively withdrawn must apply for readmission to return to the program. https://drexel.edu/grad/apply/readmission/

Voluntary Withdrawal from the Program

Students who wish to withdraw from the program should do so in consultation with their faculty mentor, academic advisor, and the Program Director. Students must work with their academic advisor to complete all necessary paperwork.

Probation/Dismissal

A graduate student is placed on academic probation if either the term or cumulative GPA falls below the established minimum grade point average of 3.00 (noting that a cumulative 3.3 GPA is required for final graduation). Once a graduate student is placed on probation, the Graduate College will place a registration hold on the student's record. The hold will not be removed until the student has met with their academic advisor and faculty mentor and an agreed-upon written academic plan for remediation is developed and submitted to the Graduate College. After initial placement on probation, the graduate student will continue on a probationary status for two subsequent consecutive terms. A graduate student can return to good academic standing if the term and cumulative GPA for these two subsequent consecutive terms are each at least a 3.00. If the graduate student fails to meet the requirements of the academic probation, the student will be dismissed from the University. This academic dismissal will be noted on the student's academic transcript. A graduate student who was previously placed on probation, and successfully returned to good academic standing will be dismissed from the University if they fail to maintain in good academic standing thereafter during their tenure at the University.
Students whose cumulative GPA is below 3.3 cannot graduate from the program.

Time Limits

A student has a total of seven years from initial enrollment to completion of dissertation to satisfy requirements for the PhD degree. Exceptions may be made in the case of an approved, extended leave of absence.

All But Dissertation (ABD) Status

The Graduate College should be informed quarterly of students who are eligible to be designated as "all but dissertation" (ABD) status. The Graduate College guidelines on ABD status are here: The Doctoral Tuition Guidelines document

Eligibility

Following a doctoral student's period of active study and research, during which time they are enrolled full-time (normally 4 or 5 years), the student may be eligible to move to part-time "all but dissertation" (ABD) status. Such status is reserved for students who have completed all degree requirements (i.e., coursework, research, successful dissertation proposal and clinical training if relevant) except for the dissertation, and who are no longer engaged full-time at Drexel. Upon the recommendation of their program director and department head, such students can petition the Graduate College to be enrolled part-time via non-billable research credits. Fees will continue to be the responsibility of the sponsoring department or the student him or herself. Students on ABD status must be mindful of the seven-year limit on time to degree completion.

Process

These recommendations should be submitted by the faculty mentor to the DSPH academic advisor, who will coordinate with the Graduate College to move the student to ABD status. This process must be completed by the end of week two of the term prior to the student being placed in ABD Status.

Once the graduate college confirms the students' ABD status, non-billable research credits can be applied if requested. Students must be mindful of the time limit to complete the doctoral degree (seven years from initial matriculation); ABD status will not be granted as a routine matter beyond this time. Students who anticipate exceeding the seven-year limit may request an extension from the Graduate College. The request must explain the circumstances leading to the delay, must articulate a plan and timeline for completing the dissertation project and any other outstanding degree requirements, and must be accompanied by an endorsement of the student's faculty mentor and program director.

Graduation Requirements

https://drexel.edu/graduatecollege/news-events/graduation/

Fellowships, Scholarships, and Financial Assistance

Travel Subsidies

See: **https://dsphstudent.info/student-engagement/student-funding/**

Research Fellowships

The Department may have Research Fellowship Scholarships available. A Research Fellow (RF) is a full-time graduate student appointment (20 hours per week) focused on dissertation or other degree-related research. Research Fellows receive a stipend, full tuition remission, and a health insurance subsidy for one academic year. Continued consideration for funding in subsequent academic years is dependent on maintaining satisfactory academic performance.

Environmental and Occupational Health Fellowship

Prospective doctoral students in Environmental and Occupational Health are eligible for the Environmental and Occupational Health Fellowship. Fellows will receive a stipend, full tuition remission, and a health insurance subsidy for the first two academic years, contingent on adequate academic progress. Continued consideration for funding in subsequent academic years is dependent on maintaining satisfactory academic performance.

Teaching Assistant Policy

All doctoral students who receive a stipend are required to TA. Please see Doctoral Student Addendum for details.

https://docs.google.com/document/d/1twImwxz2Lz-xn3prq5Batxt651j_bIMOdv4pFxU_BCs/edit

Other Financial Assistance

The Financial Aid office can also assist students in finding the resources necessary to attend Drexel University. The Financial Aid office assists students in seeking and applying for grants, scholarships and loans to help meet their educational costs.

All students must complete the Free Application for Federal Student Aid (FAFSA) to be considered for financial aid. The electronic version of this form, as well as additional Drexel University financial aid information can be found here: http://drexel.edu/drexelcentral. Students wishing to be considered for financial assistance may also be required to complete an institutional financial aid application and provide supporting documentation.

PROFESSIONAL DEVELOPMENT

Career Guidance

Job announcements are sent to students' official Drexel email accounts from the department or DSPH as they become available. In addition, **Career Resources** are detailed on Dornsife DASH.

RESOURCES

Dornsife DASH is an online reference that includes DSPH policies, upcoming events, student life information, career resources, university resources, and academic information.

Appendix A: Dissertation Proposal Format Guide

The faculty mentor and committee in consultation with the student will determine the appropriate format of the dissertation proposal that aligns with the student's research focus. The EOH doctoral program strongly recommends that students use a "Three Paper Format" for their dissertation, in which students prepare a dissertation containing three research papers on a chosen theme, addressing one overarching research objective. The papers should be of publishable quality in appropriate journals in the field of study, ensuring that the substantial work done by both the trainee and the dissertation committee can become part of the published literature.

The proposal should be written in the format of a National Institutes of Health (NIH) R01 proposal. **https://grants.nih.gov/grants/how-to-apply-application-guide.html** [SF424 (R&R) format]. The purpose of our format is to help the student get accustomed to writing fundable scientific research proposals in NIH format. In this format, dissertation proposals are expected to include the following sections:

A. Specific Aims (1-page limit).
The Specific Aims page is a one-page overview of the research. State concisely the overall objectives of the research, and justification of the need for research in this area. List 3 specific aims, one for each of the planned papers to be produced from the research.

B. Research Strategy (12-page limit).
The Research Strategy is the proposal. It contains several sections:

> B1. Background and Significance (no strict page limit; typically 1-3 pages, contained within the Research Strategy 12-page limit). Describes the relevant background to the dissertation in a format which demonstrates the students' knowledge of the topic area, and a general discussion of the significance of the work (why is this scientific question important?). The review of the relevant literature for the research project need not be comprehensive, but it should provide enough information to describe gaps in knowledge that will be addressed by the proposed research.
>
> B2. Innovation (no strict page limit; typically 1 page or less, contained within the Research Strategy 12-page limit). Explains how the research is novel, in methods, approach, or in challenging an existing paradigm of knowledge.
>
> B3. Approach (no strict page limit; typically 7-10 pages, contained within the Research Strategy 12-page limit). Describes the overall strategy for the research project, in detail, including considerations such as study design, study population, environmental or occupational exposure data (exposure assessment, reliability, processing, coding), health data (source or data collection, reliability, processing, coding), data analysis (can be listed separately for the three specific aims), and potential pitfalls and alternative approaches. Preliminary data or results are encouraged within the Approach section. As appropriate for the student's three specific aims, the Approach section can be written as one general, shared approach, or can be written in three sections (one for each specific aim).

B4. Anticipated pitfalls and alternative approaches; (typically ½ page, contained within the Research Strategy 12-page limit).

B5. Timeline; (typically ¼ page, contained within the Research Strategy 12-page limit).
Lay out the timeline to complete the dissertation, in a list or table format, starting after passing the proposal defense and ending at the dissertation defense. Include major milestones of your dissertation (e.g., questionnaire administration; draft manuscript to address specific aim 1) and the months/years you anticipate those activities will take place.

C. Bibliography and References Cited (no page limit).
List references cited in the Specific Aims and Research Strategy, in order of appearance in the text. The numbered reference list should correspond with numbered in-text citations.

The entire proposal should be written using at least 11pt font, with 0.5" margins, and must adhere to the page limits. Save the document as a .pdf file and email it to the Committee at least 2 weeks before the scheduled date of the proposal defense. Reports that do not follow the approved formatting guidelines or that are not sent to the committee at least 2 weeks before the proposal defense will not be accepted (and will require reformatting and/or rescheduling the proposal defense). The Committee will use this document to prepare questions for the proposal defense. Note that this written report will not be the sole focus of the questions posed during the oral proposal defense; other questions will include general knowledge pertinent to the student's field of research.

Appendix B: Dissertation Format Guide

Students will use the "Three Paper Format" for their dissertation. In the three-paper format, students prepare a dissertation proposal focused on the development of three research papers addressing original research in a chosen topic area. The papers should be of publishable quality in appropriate peer-reviewed journals in the field of study. This format of the dissertation proposal has the advantage of ensuring that the substantial work done by both the student and the dissertation committee can become part of the published literature. In the three-paper option, the written dissertation proposal should have a theme to which all three papers contribute. The written document should also include the relevant background to the dissertation work in a format which demonstrates the students' knowledge of the topic area, the results of the work accomplished by the student (presented in the document as the three individual research papers), and a general discussion of the meaning of the work.

Under this format, dissertations are expected to have the following substantive content components:

1. An Introduction, which provides an overview of the thesis and overarching objectives.
2. A background chapter that includes a review of the relevant background literature and justifies the significance of the research (gaps in knowledge).
3. Three chapters, of publishable quality, reporting original research (subject matter science or methodological), each organized as a free-standing manuscript. Manuscript chapter length may vary, as appropriate to the work and target journal. Within the dissertation, manuscript chapters should follow a similar format (in terms of subheadings, references, etc.), even if target journals for the individual publications have varying formats. Tables and Figures should be incorporated into the chapters or placed in a subsection at the end of each manuscript. Each manuscript chapter should begin with an abstract no longer than 250 words. It is anticipated that the Background sections of manuscript chapters will replicate some information from the background literature review chapter (#2), though possibly in lesser detail, and presented only as relevant to the specific chapter.
4. A final chapter that integrates findings across the manuscript chapters and discusses conclusions and recommendations.
5. Appendices that provide more detailed explanation of methods, such as copies of data collection instruments, presentation of additional results (including additional tables and figures), and discussion of issues in more depth that can be included in a manuscript-length chapter. These appendices should be referred to parenthetically in the manuscript chapters at points where readers would be interested in obtaining more detail.
6. Note that if the three-paper format is used, separate reference lists are generated at the back of each chapter. A particular reference may thus be listed in more than one reference section.

All other matters of formatting should be done in compliance with the Drexel University Thesis and Dissertation Manual and processes:
https://www.library.drexel.edu/services/thesis-and-dissertation
https://drexel.edu/graduatecollege/academics/thesis-and-dissertation/

Appendix C: Yearly Progress Report Form

Environmental and Occupational Health Doctoral Program
Student Yearly Progress Report

Student Name: _____
Program Degree/Term/Year Entered: _____

1. Overall academic progress (e.g., any issues with required course work)

2. Date of Written Comprehensive Exam and Outcome (if applicable during this academic year):

3. Date of Proposal Defense, dissertation title, outcome of exam/advancement to candidacy (if applicable):

4. Dates of thesis/dissertation committee meetings in the past academic year (if student is post-proposal defense). Outcomes of meetings.

5. Please list all conferences you (the student) have attended in the past year. Include whether the presentation was oral or a poster, the date of the presentation.

6. Please list any papers you (the student) have published/accepted/submitted during the last academic year.

7. Other than Drexel Doctoral Student fellowships (tuition and stipend), please list all awards, fellowships, dissertation grants or travel grants you (the student) have received in the past academic year.

8. Please describe your (the student's) progress in their dissertation research for the past year. Have there been any alterations in the direction/aims of the student's project? If so, please explain. Give quarter for expected advancement (proposal) and/or graduation (if applicable).

9. Have you (the student) worked with your faculty mentor or other faculty members on research (including papers, presentations, grant submissions)? If so, please identify and describe the outcome (s)?

10. Have you (the student) served as a Teaching Fellow/Assistant or Instructor in the past year? Please list courses for which the student served as TA or Instructor. Report any evidence of effectiveness (e.g., course evaluations, award nominations).

11. Please list your primary goals for the upcoming academic year.

12. Please describe any concerns/issues with your (the student's) progress that need to be addressed.

Student Name (please print): _____

Student Signature _____ Date_____

Faculty Advisor Signature _____ Date _____

Program Director Signature _____ Date_____