



Doctor of Public Health (DrPH)
Environmental and Occupational Health
Student Handbook
East Carolina University

TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
General Overview	5
Advancement to Doctoral Candidacy - Requirements	5
Doctoral Dissertation	5
Applied Learning and Program Enrichment.....	6
Time Limits for Completion of Degree Requirements	6
Termination or Continuance of Graduate Study	6
Committees.....	6
Dissertation Committee	7
Program of Study and Annual Review	7
Course Work.....	7
First Year Research Project	8
Comprehensive Examination & Candidacy Guidelines	9
Integrative Learning Experience: DrPH Dissertation	13
Application to Graduate	16



Dear Doctoral Student,

Welcome to East Carolina University and the Doctor of Public Health (DrPH), Environmental and Occupational Health Program. This Handbook has been written to assist you in your journey through the DrPH program. The procedures within this document are guidelines and policies of the department and the university and we urge you to refer to this as you progress through the program. Please be cognizant, that some parts of the doctoral program are newly established, and policies are constantly evolving. As such, the DrPH Program Committee may modify this handbook as needed. Therefore, it is important that you keep abreast of all changes and if you have any questions concerning the program, please feel free to communicate your questions or concerns to either your Major Professor or to myself, the program director.

Throughout your journey, I encourage you to work hard and to communicate with others including, faculty, other students, and community leaders. As an emerging public health professional, it is important that you keep your senses open and learn with an unbiased opinion both inside and outside the classroom. Recognize the many environmental and occupational concerns that we face and determine the best approach on how to overcome these challenges.

As you gather knowledge and move through the program, try to maintain a sense of balance in your life with your studies, family and other responsibilities. Remember to take the time to enjoy this learning experience, while sharing your knowledge and helping others throughout your life.

In closing, I wish you the very best that life has to offer and hope that you will continue to strive to make positive contributions to the dynamic and ever-changing field of environmental health. On behalf of East Carolina University, I wish you the best success in your pursuit of the DrPH degree.

Sincerely,

A handwritten signature in black ink that reads "Greg Kearney". The signature is written in a cursive, flowing style.

Greg Kearney, DrPH, MPH
DrPH Program Director

The Faculty

The full-time faculty in the Doctor of Public Health, Environmental and Occupational Health Program includes individuals representing a range of research and environmental public health practice backgrounds including, sanitation, environmental health sciences, industrial hygiene, coastal resources management, nanotoxicology, epidemiology, water and wastewater treatment, climate change, toxicology, noise exposure, chemical engineering, vector control, indoor/outdoor air quality, risk assessment, and ecology.

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General Overview

The DrPH, Environmental and Occupational Health concentration requires completion of a minimum of 50 credit hours; 36 credit hours of didactic coursework, 5 credit hours of applied field experience (APE) and 9 credit hours of dissertation research beyond the master's degree.

In fulfillment of the DrPH, the student should possess a master of public health or equivalent degree with background experience of working in public health while meeting a combination of coursework, field practicum and research dissertation, which includes having met the following; graduate-level public health core curriculum (24 credit hours, minimum); a support core taken across disciplines (8 credit hours, minimum), concentration core (15 credit hours, minimum), focus track courses (9 credit hours), approved electives (4 credit hours), applied field practicum internship (5 hours, minimum), and dissertation (9 hours, minimum).

The student and Major Professor in consultation with the Program Director and Committee will select and design an area of major concentration and field practicum site experience for the student. The course of study ordinarily requires approximately three years of full-time study.

Transfer Credit

Credit will be accepted for transfer at the discretion of the Program Director in the Department of Public Health and the Dean of the Graduate School.

Advancement to Doctoral Candidacy - Requirements

Following completion of most of the required course work and prior to admission to candidacy for the DrPH degree, students must pass a comprehensive examination intended to test fundamental knowledge in environmental and occupational health. The student candidate will undergo a 3-day written examination. The student's Major Professor and the Program Committee are responsible for the administration and evaluation of the comprehensive examination. Upon completion of the request for candidacy form, the candidacy recommendation of the committee is sent from the student's Major Professor to the Program Director of Doctor of Public Health, Environmental and Occupational Health, from the student's Major Professor, who then forwards it to the Dean of the Graduate School.

Doctoral Dissertation

After passing the comprehensive examination, the candidate must initiate the development of an appropriate dissertation research project. The dissertation must reflect independent, scholarly research that will contribute significant new knowledge to the candidate's area of concentration.

Prior to initiating the dissertation research, the candidate's Dissertation Committee must approve the prospectus of the proposed dissertation. The candidate formally presents the prospectus to the faculty of the Doctor of Public Health at an open meeting. The Dissertation Committee must agree that the research proposal is satisfactory, with no more than one dissenting vote allowed.

Upon the satisfactory completion of all requirements, the Major Professor, Dissertation Committee, Program Director and Departmental Chairperson will recommend to the Dean of the Graduate School the award of the doctoral degree. Students are referred to the Graduate School website for dissertation formatting and electronic submission.

Applied Learning and Program Enrichment

In addition to course requirements, each student is required to complete a mentored field practicum to assist the student in gaining perspective and experience in a public health management setting. Through the curriculum, students will be encouraged to participate in university-wide seminars, poster presentations and networking opportunities with individuals, groups inside and outside the university. Other enrichment areas may include being required to take a didactic course on teaching if the student is assigned to teach courses as part of an assistantship or other contract.

Time Limits for Completion of Degree Requirements

A doctoral degree program must be completed before the end of the twelfth semester, excluding summers, following initial enrollment. With endorsement of the student's Major Professor and Program Committee and also the Departmental Chairperson, a student may request one extension of not more than two semesters, summers included.

Termination or Continuance of Graduate Study

Failure to meet the requirements of the program as outlined by the Graduate School (www.ecu.edu/gradschool) will result in termination of graduate study. Graduate School regulations for most academic issues are utilized and can be found in the [Academic Regulations](#) section of this catalog.

The ECU Graduate School requires a 3.0 GPA for retention and graduation. In addition, the Department of Public Health requires that students earn no less than a grade of “B” in more than 1 course during their degree program. This includes all departmental courses including didactic, clinical, or research taught by any delivery method.

Upon receipt of the second grade of less than a “B,” a review of the student’s academic and clinical progress will be conducted by the student’s advisor, the Program Director and the Departmental Chair. Recommendations for continuance or termination will be made to the members of the Doctoral committee for consideration. If the decision of the Doctoral Committee is for termination, this will be communicated by the Program Director to the student and the Graduate School. If the decision is for continuation, this will be communicated to the student.

Upon the 3rd course with lower than a “B” grade, the Program Director shall notify in writing the student and the Graduate School that the student’s degree program is terminated from the degree program. The student can appeal this termination by writing a letter to the Program Director and asking the Doctoral Committee for reinstatement. The Program Director will convey the decision of the committee to the student and the Graduate School. If allowed to continue in the program, the student may not earn any additional credit hours of less than a “B” grade. If terminated at this point the student may appeal the decision through the ECU school appeals procedure (Rev. September 2011).

Committees

Program Committee

Upon entering the program, a Major Professor will be selected. This selection will take place prior to or during the first semester. Selection will be based on the student’s professional interests, faculty professional interests, and faculty availability. The student, Program Director, and the

involved faculty will make the selection. The Major Professor will monitor the student's academic and research progress closely. The student and his/her Major Professor will establish a Program Committee. This also will be accomplished during the first semester of study. The Program Committee must consist of a minimum of three faculty members. The Major Professor and Program Committee will oversee the student's completion of the first-year research project and comprehensive examinations. A change in Major Professor may be made after consultation with the involved faculty, Director of DrPH and the Departmental Chairperson.

Dissertation Committee

After passing the comprehensive examination, the candidate must establish a Dissertation Committee and initiate the development of an appropriate dissertation research project. The dissertation must reflect original and independent, scholarly research that will contribute significant new knowledge to the candidate's area of major concentration. The student will choose the Dissertation Committee with assistance from his/her Major Professor.

Faculty chairing or serving on dissertation committees must have appropriate graduate faculty status as defined in the East Carolina University Faculty Manual. All members of a dissertation committee must have either associate graduate faculty status or full graduate faculty status. The committee must consist of a minimum of three graduate faculty members. More information on dissertation can be found at the end of this document.

Program of Study and Annual Review

Once the Program Committee has been established, a Tentative Program of Study will be completed with the Major Professor in consultation with the Program Committee. This is to be accomplished by the end of the student's first year of study. This document is to plan for the student's upcoming course enrollment. This document will serve as a guide for the student and the Program Committee and should be updated annually.

After the completion of each year of study, several review documents are to be completed. The student will update the Program of Study Form and complete the Annual Review Form. An oral presentation of the year's accomplishments to the committee is required. This document should include a review of the courses and research completed during the past year.

To accomplish this review, several areas are evaluated: 1) course work, 2) research, and 3) assistantship activity. Faculty involved with the supervision of a student will be asked to evaluate the student's performance in these areas during the Annual Doctoral Student Review meeting conducted by the Doctoral Committee (see below). The Program Director will complete a synopsis of the annual program review. The Major Professor, Program Director and the student will meet, examine the review, and sign the synopsis upon completion of this meeting. This document is to be distributed to the student's Program Committee, Program Director, and Departmental Chair by June 30, with a copy placed in the student's departmental file.

Course Work

The didactic portion of the doctoral program consists of 36 credit hours (including 8 CH interdisciplinary core, 15 CH concentration core; 9 CH specialty track; 4 CH elective) and the 5 CH integrative field experience and 9 CH dissertation. The student should select an area of major concentration in conjunction with his/her Major Professor. The integrative field experience and

associated project deliverable should be coordinated in conjunction with the Major Professor, host site representative and the DrPH Program Director.

First Year Research Project

Each student is required to complete a research project by the end of first year under the direction of his/her Major Professor. Successful completion of the research project requires (1) the student giving a formal presentation of the work at an open forum that includes students, faculty, and staff and (2) approval of the written document by his/her Major Professor and Program Committee.

The student's Major Professor and Program Committee may have additional requirements the student needs to meet to successfully complete the first-year project. The Major Professor and Program Committee will issue a grade of "satisfactory", "unsatisfactory with stipulations", or "fail". The recommendation of the committee is sent to the DrPH Program Director.

- ***Satisfactory:** indicates the student has successfully completed and defended the first-year project.*
- ***Unsatisfactory: with stipulations** indicates the student showed some weaknesses in one or more areas (written paper, oral presentation) and the Program Committee determines a remediation plan and timeline for completing required activities.*
- ***Fail:** indicates the student's performance on the written and oral presentation was unsatisfactory. The Major Professor will summarize the committee's evaluation of the student's performance, recommend dismissal from the program, and submit it to the Program Director and the Department Chair.*

Comprehensive Examination & Candidacy Guidelines

Program Requirements

To achieve “Doctoral Candidate” status, ECU Graduate School guidelines requires that a doctoral student must meet the milestones as outlined below.

1. Successful completion of sufficient coursework to sit for candidacy exam (see section 1.2 of this document).
2. Successful completion of candidacy exam (written, oral, or combination of this or other requirements appropriate to the discipline).
3. Successful selection of a dissertation research advisor and a dissertation committee.
4. Successful preparation of a dissertation research plan (e.g., proposal), approved by the dissertation advisor, program director, and/or dissertation committee.
5. Completion and submission of the [Advancement to Doctoral Candidacy](#) form and subsequent approval from the Graduate School

In accordance with ECU policy and accrediting body, Council for Education Public Health (CEPH), the Doctor of Public Health (DrPH), Environmental and Occupational Health (EOH) Program Committee has established that DrPH students meet the above requirements prior to course registration for “PUBH 9000 – Dissertation.” Also noted is that doctoral student must achieve candidacy within 5 calendar years, or 72 credit hours attempted, whichever comes first. Furthermore, a doctoral student should complete all requirements of the degree within 10 calendar years.

1.0 Doctor of Public Health Comprehensive Examination

1.1 Policy for Eligibility

The DrPH Program Committee has established this policy. All doctoral students in the DrPH, EOH program will complete their comprehensive examinations in accordance with this policy.

The purpose of the written comprehensive examination is to evaluate the student’s ability to integrate, analyze, and synthesize information acquired from didactic coursework and training in the DrPH Program curriculum. To be eligible for candidacy, the student must have satisfied all program of study coursework as determined by the ECU Graduate School, the student’s Major Professor and the DrPH Program Committee.

Because the DrPH is an applied degree, the Committee has determined that upon successfully taking and passing all of the didactic coursework including the interdisciplinary core and concentration core courses a doctoral student may sit for the comprehensive final exam. The student’s Major Professor and DrPH Program Committee will guide the composition of the comprehensive exam based on content criteria established through accreditation competencies and learning objectives established by Council on Education for Public Health (CEPH).

The comprehensive examination is a major milestone in the DrPH, EOH curricula and is considered a critical part of advancing towards doctoral candidacy status for the DrPH degree. The written comprehensive examination tests the student’s fundamental knowledge and competencies in the major areas of environmental and occupational health. The DrPH is an advanced, applied,

practice degree. Therefore, in addition to having foundational knowledge in didactic coursework, it is critical that the student possess aptitude by demonstrating knowledge and analytical skills in leadership, program management and professional communication.

1.2 Examination Content

The written examination will consist of the following:

1) an open-book examination, focusing on coursework related to the interdisciplinary and concentration core courses and the student's focus track (see Figure 1 below) and, 2) an closed-book integrative case scenario, designed to gauge the student's ability to integrate core concepts of environmental and occupational health, public health, policy, administration and leadership as applied to their chosen research area and/or project.

EOH courses included in the comprehensive examination

- PUBH 8125: Environmental and Occupational Epidemiology
- PHAR 7680: Essentials of Toxicology of Diseases
- PUBH 7930: Environmental and Occupational Exposure Assessment
- PUBH 8020: Organizational Theory and Leadership
- PUBH 8025: Quantitative Research Methods
- HUMS 7004: Ethics Research, and
- *PUBH (TBD): Focus Track

*The PUBH (TBD) course will be selected by the student's Major Professor tailored to their intended research focus and/or selected project.

The questions on the exam will ascertain the competency of the student and test the student's understanding of their specific research area as applied to environmental and public health. Exam questions may be developed by the student's advisor and/or other instructors that taught the courses related to the student's research area or focus track and/or project.

The student's Major Professor will prepare the integrative question that tests the student's ability to integrate learned public health communication and leadership skills applied to the concepts of an environmental public health case scenario. The question should be phrased to state these expectations explicitly. The question could focus on a theoretical concept related to their research area or the student could be provided with a dataset and provide an analysis of the supplied data. This question will not be standardized across the cohort and will be tailored to the student's research interests/focus track.

2.0 Examination Format and Procedures

The instructor of record from each of the above courses will prepare 1-2 questions based on the primary thematic components covered in the course content. Questions from concentration core courses may be modified to match curriculum and/or changes in instructors (e.g., different instructors may focus on different competencies). The comprehensive exam will be reflective of the instruction at the time the course was delivered to the student. The comprehensive exam will be in an essay style, written format and will occur over a three-day period as follows below.

2.1 Open-book Written Examination (Days 1 and 2)

On the first two days of the examination, the student will complete the open-book section. The

open-book section will consist of questions taken from the interdisciplinary core, concentration core and focus track/research area. Both on-campus and distance education doctoral students are expected to complete the comprehensive exam on ECU campus.

The exam will be scheduled for 6 hours on each day and will consist of between 8 and 15 questions (1 – 2 questions per core class including their focus track). The date and start time of the exam will be set by the Major Professor in consultation with the student and proctoring center.

The student will be allowed to utilize the Internet, textbooks, and/or library databases to substantiate their response. Since these resources are available to the student, the expectation is for a higher quality answer relative to the open-book portion of the examination. The student should sufficiently and accurately reference their responses while synthesizing the information from multiple disciplines to craft a thoughtful, organized response. Students are expected to work independently and reference all materials used in developing their response.

2.2 Closed-book Written Examination (Day 3)

The second part (Day 3) of the examination will be closed-book, consisting of an integrative, scenario style, environmental public health question(s) tailored to the student's research area or selected focus track. The student will **not** be allowed to utilize the Internet, textbooks, and/or library databases to substantiate their response and will have 6 hours to complete the questions. The question(s) for the exam will be developed in coordination with the student's Major Professor and the DrPH Committee.

2.3 Oral Examination (scheduled within 2 weeks of completion of written examination)

If the student receives an unsatisfactory score ("U") for any portion of the written comprehensive examination (see section 3.2 for grade expectations), the student must meet with the DrPH Review Committee member(s) to discuss areas of weakness and to schedule a follow-up oral examination. The student must schedule the oral examination within two weeks following the receiving notification of the score for the written examination. The oral examination will consist of a panel of all the Committee members responsible for evaluating the written comprehensive exams. Oral examinations will be formatted similar to a panel interview. The student may be expected to answer questions from all Committee members. The student should expect approximately 2 to 4 hours for the oral examination to allow enough time for all Committee members to ask questions.

3.0 Examination Review, Expectations, and Outcomes

3.1 Examination Review Committee

The Examination Review Committee consists of the instructors of record that prepared questions for the written and/or oral comprehensive examination (the members may be different than the student's proposed dissertation committee). All Committee members will be able to review answers provided by the student. Committee members will only be responsible for evaluating responses to questions that the Committee member submitted. However, this is not to preclude other Committee members from discussing the student's responses to other questions. The student's Major Professor and, if applicable, other instructors that provided questions for the comprehensive exam will evaluate the student's responses within his/her research area or focus track. The student's Major Professor will be responsible for retrieving test scores from other instructors reporting grades on the final exam. The final score will be presented to the student, by

the Major Professor within 14 business days of the student taking the final exam.

3.2 Expectations

The student is expected to achieve a Satisfactory “S” or “Pass” on all parts of the exam. If the student receives an “Unsatisfactory” on any part of the exam, the student must meet with his/her Major Professor within 14 business days to discuss scheduling a follow up oral examination with the Review Committee (see section 2.3 for more details).

3.3 Examination Outcomes

Upon completion of the comprehensive exam in its entirety, those designated faculty will have up to 14 business days to grade the designated section of the exam. The second part of the exam (closed book: Integrative Learning) will be returned to the student’s Major Professor (or appointee) for review by the Committee and the score returned to the student as mentioned above.

After review by the Examination Review Committee, the outcomes of the exam will be scored as follows; 1) S - Satisfactory progress; 2) U - Unsatisfactory progress with areas of weakness (oral exam required) or; 3) UT - Unsatisfactory progress and termination from the program.

(S): If the student receives an “S” (satisfactory reviews from the reviewing committee), the student will be considered to have “passed” and, if in good academic standing and has successfully defended his/her proposal, will advance towards achieving doctoral candidacy status as outlined by the policies set forth by the ECU Graduate School (see Foreword).

(U) If the student receives an “U” or unsatisfactory reviews on any aspect of the written comprehensive exam, the student must schedule an oral examination (see section 2.3 for more details) with the Review Committee. The follow-up oral examination may result in three outcomes: 1) S - Satisfactory progress, 2) U - Unsatisfactory progress with additional coursework assigned to improve areas of weakness; or 3) UT – Unsatisfactory progress and termination from the program.

(UT) If the student receives Unsatisfactory progress and does not pass the oral examination, the student may be considered by the Review Committee to be terminated from the program.

Results of the comprehensive exam are recorded by the Major Professor and forwarded to the Program Director for submission to the Graduate School.

Integrative Learning Experience: DrPH Dissertation

Program Requirements: Prospectus

In accordance with CEPH accreditation criteria, all DrPH candidates are required to generate field-based products consistent with advanced practice designed to influence programs, policies, or systems addressing public health. The products must demonstrate synthesis of foundational and concentration competencies (CEPH, 10/16). The Integrative Learning Experience (ILE) for the DrPH is judged by the criteria set forth by CEPH and the ECU doctoral dissertation requirements.

In accordance with ECU policies, prior to initiating dissertation research, the candidate's Dissertation Committee must approve a written prospectus and oral presentation of the proposed dissertation. Public announcement of the Prospectus Presentation must be made to the Department. Upon completion of the Prospectus Presentation, the Doctoral Prospectus Report Form is completed and returned to the Director of Public Health and Departmental Chair for signatures and a copy placed in the student's departmental file. The [Pre-Thesis or –Dissertation Research Approval Form](#) is also completed and submitted to the Director of Doctor of Public Health who will then forward the results to the Dean of the Graduate School.

DrPH Dissertation Guidelines

DrPH students fulfill the Integrative Learning Experience through the completion of a dissertation. DrPH dissertations must meet the following criteria:

- Students must generate field-based products consistent with advanced practice that are designed to influence programs, policies or systems addressing public health.
- Students must demonstrate synthesis of a minimum of two (2) DrPH Foundational Competencies and three (3) DrPH major- specific competencies through the dissertation work and final products.

Students will be evaluated by the rubric included in Appendix D. However, these are not the only criteria by which students are assessed. The DrPH committee will provide a comprehensive assessment of the student's dissertation proposal and final dissertation. Students should familiarize themselves with the criteria to ensure successful completion of the DrPH dissertation requirements.

Students are required to submit a copy of the DrPH ILE form (Appendix D) upon submission of the dissertation proposal to the DrPH Program Director along with other required documentation per the submission guidelines. Completion of this form is required for accreditation purposes.

Acceptable dissertation projects will be broadly defined to reflect the historic and current interests of ECU DrPH students. The dissertation will be problem or opportunity focused. The goal is to identify an important public health problem or opportunity and develop an appropriate solution, intervention or strategy. As such, the results might be targeted at public and/or private policy makers, policy influential, and/or program managers and corporate decision-makers with specific information to inform, improve, and revise existing programs or initiate new, needed, or especially effective programs. Examples of dissertation research approaches include but are not limited to:

examination of the health status of a group and environmental/occupational public health concerns, evaluation or other critical assessment of an intervention or policy being promoted or implemented, analysis of management issues, analysis of environmental/occupational health policy or practice issues, assessment of community assets, transdisciplinary research, framing of public health problems, community based participatory research, epidemiologic studies, and methodological contributions in the context of environmental/occupational health.

Should the student and/or the student's Dissertation Committee have any question as to whether the student's research approach is appropriate for a problem or opportunity focused dissertation, the question should be forwarded to the DrPH Program Director for his/her opinion. If the approach is found to be an exception, a formal request for exception must be approved by the student's Dissertation Committee and the DrPH Program Director.

Format of the Dissertation

The format of the dissertation will be one of three options: a standard dissertation, the three-paper option, or an alternate single dissertation format acceptable to the student's Dissertation Committee.

Option 1. A standard dissertation will usually incorporate the following specified content:

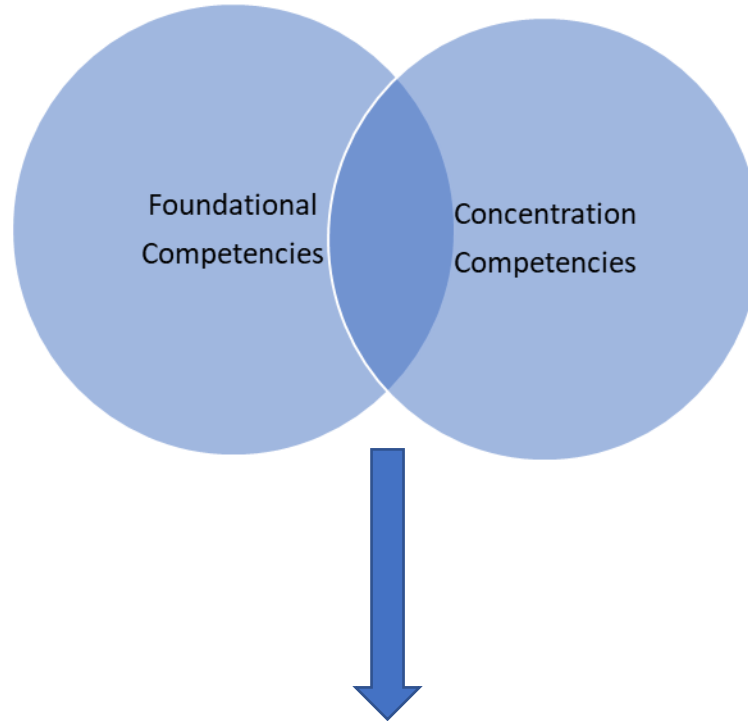
Statement of the public health problem or opportunity and the resulting research question,

- Critical review of the scientific literature relevant to that problem or opportunity,
- Conceptual framework that includes the relevant social, scientific, economic, political, environmental, human rights, administrative, and/or cultural context
- Description of the study design or data sources and analytic methods used to answer the research question.
- Analytic results and their implications for the problem or opportunity under study
- Recommendations based on the results of the study
- Strategy for implementing and evaluating the recommendations, taking into consideration the contextual factors identified in the conceptual framework

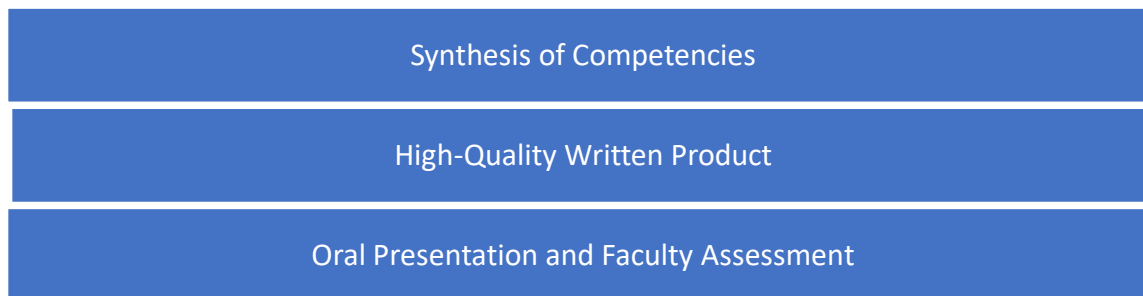
Option 2. The three-paper option format will include three articles of publishable quality along with (1) a separate introduction and (2) an integrative conclusions section. The three papers will be written in the format required by peer-reviewed journals identified by the student and approved by their Dissertation Committee. Dissertation Committees may require additional documentation to assess the student's work (e.g., extended methods section). This additional work should be part of the integrating documents and not the individual articles which should be of publishable length and content. Exception may be sought to substitute an alternate product for one of the papers (e.g., DVD, website, or educational pamphlet). The exception process will include approvals by the student's Dissertation Committee and the DrPH Program Chair.

Option 3. Alternate single dissertation formats (e.g., a book) are acceptable if approved by the student's Dissertation Committee.

As shown below, the applied learning experience should include three learned public health foundational and two concentration specific competencies (listed in Appendix D).



Integrative Learning Experience



At the conclusion of the ILE, the student will synthesize the selected competencies and develop a high-quality written paper that outlines the project's aims, introduction, background, methods, results, discussion and conclusion that explains the contribution to field of public health. (see DrPH, ILE Approval Form, Appendix D).

The candidate will present his/her dissertation research in an open forum. This will be followed by a closed defense of the candidate's research with the Program Committee. The Dissertation Committee will recommend to the Program Director and the Departmental Chairperson to award or not award the degree with stated specifications. The Director of Doctor of Public Health will forward this recommendation to the Dean of the Graduate School.

Public announcement of the Dissertation Defense must be made to the university community. All arrangements for public announcements must be made through the Office of the Dean of Health Sciences. Announcements should be made via flyers and through the East Carolina University

ANNOUNCE system with university-wide e-mail distribution. Students must comply with submission deadlines in order that the announcement of the defense appears at least two weeks prior to the defense. Public defense of the dissertation cannot occur without published announcements of the title, date, place, time and name of the defender.

Following successful oral defense of the dissertation, the Dissertation Committee will make a formal written outline of the required changes to the dissertation within one week of the dissertation defense as to what revisions are required and when these required changes must be completed. The student and Dissertation Committee will sign this document as an agreement acknowledging the required changes and deadline date. The revision deadline must be within six months of the defense date. The student is required to submit the revised dissertation to the Dissertation Committee by the agreed upon deadline. Failure to do so will result in the termination of the student's program. The student may petition the Doctoral Education Committee for an extension of the revision deadline.

The guidelines for completion of the doctoral dissertation described herein are in accordance with of the regulations of the Department and the general requirements of the Graduate School found in the East Carolina University Graduate School Bulletin.

There are two dates for Commencement (in May and December). Please consult the University Calendar for the last date to submit copies of the dissertation to the Graduate School for completion of the degree in the spring, fall, or summer term.

Application to Graduate

Following successful completion of the requirements of the doctorate degree as determined by the Major Professor, students must make a formal application for graduation (<http://www.ecu.edu/cs-acad/gradschool/graduation.cfm>).

The *Application for Graduation* must be made and submitted to the Office of the Registrar at least one semester prior to completing the requirements of the degree as stated by the Graduate Catalog (. Students must also complete the *Graduate Summary Form*. Submit both completed and printed forms to the Graduation Services office in the Office of the Registrar. The weblinks for the application and graduate summary form can be found on the ECU Graduate School website.

Applied Practical Experience (APE) Guidelines

Program Requirements

In accordance with the Council on Education for Public Health (CEPH), all DrPH students regardless of their previous experience will complete the Applied Practical Experience (APE) course. For the ECU DrPH program this requirement is met through completion of **PUBH 8684**, a five credit-hour, **400-hour field practicum**. The APE may take place in an agency/organization where students engage in real-world projects involving public health challenges and take responsibility for the successful completion of a meaningful public health project.

Purpose

The purpose of the DrPH APE is to provide an opportunity for the student to apply in a practice setting the competencies, knowledge, and skills they have acquired through their public health courses. It requires that the students integrate and synthesize their knowledge and skills through the application of public health theories and principles to the development and implementation of one or more special projects in professional public health practice. Each student is expected to complete the field experience in the 11-week summer session, or after completing a minimum of 12 credit hours in the DrPH curriculum and with the approval of the Major Professor.

All students in the field experience option will enroll in PUBH 8684 (Public Health Program Field Experience) for 5 credit hours. The student should select a facet of public health practice that is of particular interest and appropriate to the student's program of study and professional goals. In concert with the Major Professor and affiliate preceptor (field supervisor), the student will be responsible for completing of at least one project that is meaningful for an organization and to advance public health practice.

Competencies relevant to public health curriculum are provided in the Appendix B.

Eligibility

Students are eligible to enroll in the DrPH APE (PUBH 8684) after they have completed a minimum of 12 credit hours of the interdisciplinary courses and/or concentration core courses.

1.0 APE Course Approval

The DrPH APE process begins with meeting all of the didactic coursework and approval to take the field experience course from the student's Major Professor and Program Director.

Application timeline for the DrPH (8684) APE course

To be considered for the APE the following must be submitted to BOTH your Major Professor and the Program Advisor no later than:

- Second Friday in June for the following fall semester
- Second Friday in November for the following spring semester.
- Second Friday in March for the following summer semester.

1.1 Required Documents

Prior to registering for the APE course (PUBH 8684), the student will complete the APE Description and Agreement Proposal by submitting the items below to the Major Professor and the

Program Director and include the following;

1. A current resume or CV;
2. A written description of the proposed project that addresses a public health issue and include the following;
 - i. Goals and aims of the project;
 - ii. The public health issue and background of the problem justifying its significance (i.e. how this work will promote public health and well-being of the population that it will address) (appropriately cited);
 - iii. The expected project(s) outcomes or expected results;
 - iv. An outline that includes all aspects of the project(s) including timeline, products (outline of proposed presentation) and student, faculty and preceptor's roles.
 - v. Competencies addressed through the practicum experience that clearly outlines how the competencies will be achieved as evidenced by the final project(s).
 - vi. Fully Executed University Affiliation Agreement with the precepting agency and ECU (if one is not already in place).

Please be aware that some agencies may require a criminal background check, drug screen and orientation modules prior to the beginning of your field practicum.

Please note: Major Professor and preceptor must approve the APE description and agreement form prior to the student registering for the APE.

NOTE: Failure to meet these deadlines may result in delaying your APE (and in turn your graduation) by one semester. Do not procrastinate. See application form in Appendix E.

2.0 DrPH APE (8684) Goals

Upon completion of the 400-hour APE, the student will be able to do the following:

- Demonstrate mastery of evidence based public health decision making and capacity to translate general and discipline specific empirical knowledge into effective public health practice and solve real-world public health challenges;
- Demonstrate effective communication skills, in both oral and writing;
- Demonstrate leadership, independence, and originality of the project with a significant public health impact;
- Develop a written and oral report summarizing results of the project and recommendations for action(s) using a Logic Model.
- Conduct an oral presentation to Major Professor and DrPH Committee
- Submit a written Report to Major Professor and DrPH Committee

2.1 PUBH 8684 Course Learning Objectives

As part of the 400-hour APE, the student will carry out the following:

- Apply skills and knowledge gained in coursework in public health agency setting;
- Assess public health competency mastery as evidenced by project guidelines
- Collect data following recognized criteria
- Analyze data, interpret results and communicate with professional/scientific communities.
- Discuss findings with agency and academic members through journal publications/reports etc.

3.0 DrPH APE Core Competencies

Regardless of the amount of experience DrPH students are expected to integrate three foundational and two concentration competencies (for a total of five, listed in **Appendix B**) into their field experience project(s), final report and oral presentation. One competency must be related to Leadership (competency).

4.0 APE Requirements, Expectations and Responsibilities

4.1 Establishing the APE Location: Internship Affiliation Agreement

Once the learning objectives and project goals have been drafted, the student, under the guidance of the Major Professor and/or the Program Director will develop a list of potential “field experience affiliate organizations including a suitable field preceptor (supervisor).” Note: the organization where the APE is conducted is called an “Affiliate Organization.” The individual(s) who will be the on-site supervisor(s) is/are called “preceptors.”

4.2. Agency Requirements

Students should work with their Major Professor and Program Director to seek out public health organizations and agencies for completion of their applied field practicum. Students should align APEs that provide them opportunities to learn, develop and practice high level public health skills.

Examples of appropriate agency sites include but are not limited to federal public health agencies such as the CDC, USEPA, NIOSH, state and county health departments, federally qualified health centers, community based public health organizations, non-profit health care organizations, private occupational health industry organizations and other organizations involved in public health work.

In accordance with CEPH requirements, the APE should take place within an organization external to the student’s school or program so that it is not merely an academic exercise, but application of learning to a “real world” setting. The APE may be conducted at a variety of public health practice settings. The agency and project proposal must be approved by both the agency leadership and the faculty advisor and program director. In addition, an UAA must be fully executed prior to the beginning of the APE (Note: UAAs are already in place for ECU Departments, Vidant and some other agencies. The Program Director has a master list of agencies in which UAAs are in place with ECU).

DrPH students who are currently working in a public health organization may perform the APE at their current place of employment; however, the APE must be beyond, or something other than their current work duties, allowing for the application of advanced (doctoral) level public health

knowledge and skills to be applied in the practice (real-world) setting.

4.3. Preceptor Requirements

The agency preceptor will have training in public health at the professional level and be in a top leadership position. The preceptor should have at a minimum a master's degree in Public Health/Environmental Health or closely related field, with substantial experience in public health at the professional level. Ideally, the preceptor will have a degree beyond the master's level. The preceptor will meet with the doctoral student on a regular basis. The student's current employer supervisor may serve as the preceptor. During the course of the 400- hour APE there must be at least three documented evaluation meetings (initial, midterm and final) evaluation meetings between the doctoral student, agency preceptor and faculty advisor.

4.4 Roles & Responsibilities

DrPH Student

The student will be responsible for the following:

- Represent ECU and should always maintain themselves in a professional manner.
- Identify APE site, community preceptor, major professor, and ensure that all arrangements, including learning contract completion and electronic signatures have been completed before registration.
- Complete the APE as outlined in the learning contract and participate in the practicum course throughout the semester(s).
- Maintain regular communication and ongoing contact with the major professor throughout the field placement course.
- Maintain a time log of hours worked and duties and submit to the major professor biweekly.
- Present products, including an oral, written report and poster (with logic model) of agency public health project.

The Agency Preceptor

The preceptor will be responsible for the following:

- Providing an opportunity for the student to pursue and complete a special project with practical relevance to the organization.
- Participating in the development of specific objectives, related to the special project and mentor the student toward achieving those objectives using the Competency Based Field Experience Objective form (attached).
- Work with the student and be able to devote sufficient time to the field practicum to ensure appropriate and comprehensive learning experience.
- Provide the day-to-day supervision throughout the student's practicum and complete a performance evaluation at the midterm and end of the final semester using Qualtrics.

Major Professor

The student's major professor will be responsible for the following:

- Providing guidance for the student as they develop and complete their learning contract and throughout the practicum experience and communicates with the community preceptor as needed.

- Assigning the student's grade based on the preceptor's evaluation of the student's performance and completion of the APE course project.

4.5. Program Procedures

While it is desired that the APE requirement be completed in one semester, some instances may require that the APE last longer than one semester. Students must register for the 5 credit-hour field practicum course and follow the timeline established and agreed upon by themselves and the faculty instructor and agency preceptor as part of the integrated learning contract. The student will clearly document the plan in the APE Description Agreement in order that all parties are in complete agreement.

It is advised that students begin working on their APE Description with their faculty advisor/instructor the semester prior to the semester they wish to register for PUBH 8684.

5.0 Applied Practice Experience Project Guidelines

As part of the applied practice experience, each DrPH student should produce products that are relevant to the public health organization where they are participating. The applied experience should include field-based project(s) emphasizing advanced public health practice.

During the APE, students should complete a monthly reflection paper due by the 5th of each month of their APE to describe the progress to date. These reflections will be reviewed by the student's faculty instructor. In addition, the preceptor will complete a midpoint and final evaluation of student performance.

The student should also include a reflective component that expresses how the applied practicum experience has demonstrated mastery of the five selected competencies. A systems level thinking approach that includes a logic model and, theoretical construct, of the identified applied public health concern/problem should be presented as part of the final recommendations. The student will prepare a poster based on the selected problem and give a 25-30 minutes presentation to their doctoral colleges, faculty instructor and agency preceptor/staff that may be in attendance. This final presentation will be held at the end of the course semester.

Grading

Students' work project should include a single project or a set of related projects that demonstrate a depth of competence in applied public health. The practicum must be discipline specific, appropriately planned, supervised and evaluated. A final grade will be awarded by the field practicum advisor/faculty instructor based upon the practice mentor/faculty instructor's evaluation and the student's final product using the rubric found in Appendix B.

PUBH 8684 Assessment

Products/Assessment Type	Competencies addressed
Field Preceptor Evaluation (Mid-term and Final)	DrPH Core Competencies and EOH concentration Competencies (5)5
Oral Presentation	EOH Concentration Competencies, Integration of DrPH Core Competencies and recommendations of applied public health problem (including systems thinking approach with accompanying logic model).
Final Written Report	EOH Concentration Competencies, Integration of DrPH Core Competencies and recommendations of applied public health problem (including systems thinking approach with logic model).

APPENDIX A

COURSES

Doctor of Public Health - Environmental and Occupational Health Concentration

1. MPH graduate with experience in public health or related fields - 50 s. h.

a. Required Interdisciplinary core - 8 s. h.

PUBH 8020 - Organizational Theory and Leadership (3)

P: Admission to the DrPH health policy, administration and leadership concentration. Organizational theories and healthcare organization evolution.

PUBH 8025 - Quantitative Research Methods (3)

P: Admission to DrPH environmental and occupational health concentration. Application, analysis and evaluation of advanced quantitative methods used in public health research.

HUMS 7004 - Ethics and Research: Humanities and Basic Medical Sciences (2)

P: Same as [GRAD 7004](#) and [NURS 7004](#). May not receive credit for both [GRAD 7004](#) and HUMS 7004. Identifies some philosophical, moral, political, legal, and social issues associated with scientific research. Explores relationship between moral, legal, professional, social, and institutional responsibilities of working scientist. Develops critical skills for understanding and evaluating arguments, claims, and policies pertaining to moral, political, legal, and social aspects of research.

b. Required Concentration core - 15 s. h.

PHAR 7680 - Toxicology (3)

P: [PHLY 7702](#) or [BIOC 7301](#) or consent of chair. Principles of toxicology and the mechanisms that underlie toxic effects from the subcellular to the organism level will be discovered. In addition, patterns of toxicity of specific chemicals will be discussed, as well as how those results can be employed in risk assessment.

PUBH 7930 - Environmental and Occupational Exposure Assessment (3)

P: Admission to DrPH environmental and occupational health concentration. Environmental and occupational exposure assessment and its role in providing information and tools for toxicology, epidemiology, and risk management applications.

PUBH 8125 - Environmental and Occupational Epidemiology (3)

P: Admission to DrPH environmental and occupational health concentration. Application of epidemiological principles to the study of occupational and general environmental exposures to contaminants. Type of exposures, outcomes and related epidemiological topics. Examination of data sources and management, sampling strategies, tracing and follow-up procedures, and monitoring and surveillance.

PUBH 8245 - Health Policy Analysis (3)

P: MPH 6700 or equivalent, MPH 6800 or equivalent. Empirical strategies and techniques for analyzing health policy impacts.

PUBH 8100 - Applied Environmental and Industrial Hygiene (3)

P: Admission to DrPH environmental and occupational health concentration. Case studies of exposures to chemical and physical hazards in both occupational and non-occupational settings will be conducted, to include exposure evaluation, exposure controls and environmental sampling to document conditions.

c. Specialty areas - 9 s. h. (Choose one specialty area)

Environmental

PUBH 8002 - Public Health Microbiology, Water and Food Safety (3)

P: Admission to DrPH environmental and occupational health concentration. Evaluation and management of microorganisms that contribute to water and food safety concerns.

PUBH 8004 - Public Health Pests and Vector-Borne Diseases (3)

P: Admission to DrPH environmental and occupational health concentration. Identification, management, and ecology of arthropods and other disease vectors, as well as characteristics and epidemiology of diseases associated with these vectors.

PUBH 8006 - Water Supply and Wastewater Treatment (3)

P: Admission to DrPH environmental and occupational health concentration. Overview of methodologies to protect water quality, with an emphasis on fundamental principles. Topics may include settling, biosolids/sludge treatment, filtration and disinfection.

Occupational

PUBH 8003 - Issues and Case Studies in Occupational Medicine (3)

P: Admission to DrPH environmental and occupational health concentration. Identification of occupational factors in the causation of disease, consideration of occupational factors in the management of disease, and measures for prevention of occupational and work-related diseases, and promotion of health in the workplace.

PUBH 8005 - Advanced Control of Occupational Hazards (3)

P: Admission to DrPH environmental and occupational health concentration. Application of engineering controls to prevent and manage occupational health hazards, such as substitution of less toxic options, modification of work processes, design of local exhaust ventilation systems, proper selections and use of personal protective equipment.

PUBH 8007 - Advanced Industrial Hygiene Applications (3)

P: Admission to DrPH environmental and occupational health concentration. Evaluation, prevention and management of occupational hazards (industrial hygiene).

d. Electives - 4 s. h. (Choose courses from below)**GEOG 6340 - Advanced Medical Geography (3)**

Topics range from geographic patterns and processes of disease to locational aspects of health care delivery systems. GIS used to describe and analyze problems in medical geography. Students become acquainted with current research literature.

PUBH 8110 - Emerging Issues in Environmental and Occupational Health (3)

P: Admission to DrPH environmental and occupational health concentration. Impact of macro-level trends, such as corporate globalization, immigration patterns, and technological development on the environment, focusing on the relationship between the environmental infrastructure and environmental media, such as air, water and waste.

PUBH 8120 - Introduction to Environmental and Occupational Health Law (3)

P: Admission to DrPH environmental and occupational health concentration. Examination of US and international environmental and occupational health legislation, such as the Clean Air Act, Clean Water Act, and Occupational Safety and Health Act.

PUBH 8150 - Environmental Risk Communication (3)

P: Admission to DrPH environmental and occupational health concentration. Focus upon the improvement of skills in effectively communicating environmental risk information to diverse groups and promoting appropriate risk prevention/control strategies.

HUMS 7201 - Independent Study (1)

P: Consent of instructor, independent exploration and scholarship of area(s) of interest in clinical bioethics. May be repeated for a maximum of 6 s.h. with change of topic.

e. Dissertation - 9 s. h.**PUBH 9000 - Dissertation Research**

May be repeated. May count a maximum of 9 s. h. This course is graded "S" or "U" and is not included in meeting the cumulative "B" average required for graduation. P: Consent of instructor. DrPH candidate's completion of all required dissertation research and submission of dissertation in final Committee-approved form.

f. Field experience - 5 s. h.**PUBH 8684 - Field Practicum**

P: Consent of instructor and completion of the DrPH interdisciplinary and concentration core courses. Application of key concepts and principles in public health work settings.

2. MPH graduate with little or no experience in public health or related field - 74 s. h.**a. Master of Public Health Foundation courses (required) - 24 s. h.**

BIOS 7021 - Biostatistics for Health Professionals I (3)

P: MATH 1065 or consent of instructor. Applies statistical methods to health sciences. Types, organization, and display of data; elementary probability; parametric and nonparametric techniques when dealing with one or two samples (matched and independent); one-way ANOVA; and simple linear regression.

MPH 6000 - Public Health Practice (3)

Foundation for public health administration. Introduces MPH degree program. Applied focus on public health problems, issues, and resources of eastern North Carolina. Describes how empirical assessment of population health status informs managerial decision-making and describes the organization of the public health infrastructure. Overview range of practice in public health and of tools and resources for health improvement.

MPH 6002 - Ethics and Law in Public Health (3)

P: [MPH 6000](#) or consent of instructor. Core issues and skills for public health administration and practice. Focuses on public health law, ethics, legislation, media relations, human services management, and emergency preparedness.

MPH 6010 - Fundamentals of Environmental Health (3)

Same as EHST 6010. Effects of environment on human health with focus on rural environment. Considers water supply and wastewater disposal, water quality, solid and hazardous wastes, air quality, occupational health and safety, food protection, and vector control.

MPH 6011 - Introduction to Epidemiology (3)

Same as HLTH 6011. Introduces methods and concepts of epidemiologic methodology and application of epidemiology in public health.

MPH 6013 - Behavioral Sciences and Health Education (3)

Introduces concepts of role of social factors in health and illness as well as health education/promotion. Overview of relationships between various social factors, with health outcomes. Includes theories and approaches of health education/promotion programs.

MPH 6020 - Research Methods (3)

Synthesize material from social and behavioral sciences, biostatistics, and epidemiology to better understand health problems.

MPH 6035 - Interdisciplinary Rural Health (3)

Same as [NURS 6035](#). Theoretical base and skills for interdisciplinary rural health practice.

b. Interdisciplinary core - 8 s. h.*PUBH 8020 - Organizational Theory and Leadership (3)*

P: Admission to the DrPH environmental and occupational health concentration. Organizational theories and healthcare organization evolution.

PUBH 8025 - Quantitative Research Methods (3)

P: Admission to DrPH environmental and occupational health concentration. Application, analysis and evaluation of advanced quantitative methods used in public health research.

HUMS 7004 - Ethic Research: Humanities and Basic Medical Sciences (2)

P: Same as [GRAD 7004](#) and [NURS 7004](#). May not receive credit for both [GRAD 7004](#) and HUMS 7004. Identifies some philosophical, moral, political, legal, and social issues associated with scientific research. Explores relationship between moral, legal, professional, social, and institutional responsibilities of working scientist. Develops critical skills for understanding and evaluating arguments, claims, and policies pertaining to moral, political, legal, and social aspects of research

c. Concentration core - 15 s. h.*PHAR 7680 - Toxicology (3)*

P: [PHLY 7702](#) or [BIOC 7301](#) or consent of chair. Principles of toxicology and the mechanisms that underlie toxic effects from the subcellular to the organism level will be discovered. In addition, patterns of toxicity of specific chemicals will be discussed, as well as how those results can be employed in risk assessment.

PUBH 7930 - Environmental and Occupational Exposure Assessment (3)

P: Admission to DrPH environmental and occupational health concentration. Environmental and occupational exposure assessment and its role in providing information and tools for toxicology, epidemiology, and risk management applications.

PUBH 8125 - Environmental and Occupational Epidemiology (3)

P: Admission to DrPH environmental and occupational health concentration. Application of epidemiological principles to the study of occupational and general environmental exposures to contaminants. Type of exposures, outcomes and related epidemiological topics. Examination of data sources and management, sampling strategies, tracing and follow-up procedures, and monitoring and surveillance.

PUBH 8110 - Emerging Issues in Environmental and Occupational Health (3)

P: Admission to DrPH environmental and occupational health concentration. Impact of macro-level trends, such as corporate globalization, immigration patterns, and technological development on the environment, focusing on the relationship between the environmental infrastructure and environmental media, such as air, water and waste.

PUBH 8245 - Health Policy Analysis (3)

P: MPH 6700 or equivalent, MPH 6800 or equivalent. Empirical strategies and techniques for analyzing health policy impacts.

d. Specialty areas - 9 s. h. (Choose a specialty area.)

Environmental

PUBH 8002 - Public Health Microbiology, Water and Food Safety (3)

P: Admission to DrPH environmental and occupational health concentration. Evaluation and management of microorganisms that contribute to water and food safety concerns.

PUBH 8004 - Public Health Pests and Vector-Borne Diseases (3)

P: Admission to DrPH environmental and occupational health concentration. Identification, management, and ecology of arthropods and other disease vectors, as well as characteristics and epidemiology of diseases associated with these vectors.

PUBH 8006 - Water Supply and Wastewater Treatment (3)

P: Admission to DrPH environmental and occupational health concentration. Overview of methodologies to protect water quality, with an emphasis on fundamental principles. Topics may include settling, biosolids/sludge treatment, filtration and disinfection.

Occupational

PUBH 8003 - Issues and Case Studies in Occupational Medicine (3)

P: Admission to DrPH environmental and occupational health concentration. Identification of occupational factors in the causation of disease, consideration of occupational factors in the management of disease, and measures for prevention of occupational and work-related diseases, and promotion of health in the workplace.

PUBH 8005 - Advanced Control of Occupational Hazards (3)

P: Admission to DrPH environmental and occupational health concentration. Application of engineering controls to prevent and manage occupational health hazards, such as substitution of less toxic options, modification of work processes, design of local exhaust ventilation systems, proper selections and use of personal protective equipment.

PUBH 8007 - Advanced Industrial Hygiene Applications (3)

P: Admission to DrPH environmental and occupational health concentration. Evaluation, prevention and management of occupational hazards (industrial hygiene).

e. Electives - 4 s. h. (Choose from courses below).

GEOG 6340 - Advanced Medical Geography (3)

Topics range from geographic patterns and processes of disease to locational aspects of health care delivery systems. GIS used to describe and analyze problems in medical geography. Students become acquainted with current research literature.

PUBH 8100 - Applied Environmental and Industrial Hygiene (3)

P: Admission to DrPH environmental and occupational health concentration. Case studies of exposures to chemical and physical hazards in both occupational and non-occupational settings will be conducted, to include exposure evaluation, exposure controls and environmental sampling to document conditions.

PUBH 8120 - Introduction to Environmental and Occupational Health Law (3)

P: Admission to DrPH environmental and occupational health concentration. Examination of US and international environmental and occupational health legislation, such as the Clean Air Act, Clean Water Act, and Occupational Safety and Health Act.

PUBH 8150 - Environmental Risk Communication (3)

P: Admission to DrPH environmental and occupational health concentration. Focus upon the improvement of skills in effectively communicating environmental risk information to diverse groups and promoting appropriate risk prevention/control strategies.

HUMS 7201 - Independent Study (1)

P: Consent of instructor, independent exploration and scholarship of area(s) of interest in clinical bioethics. May be repeated for a maximum of 6 s. h. with change of topic.

**Approved electives from other departments*

f. Dissertation - 9 s. h.*PUBH 9000 - Dissertation Research (9)*

May be repeated. May count a maximum of 9 s. h. This course is graded "S" or "U" and is not included in meeting the cumulative "B" average required for graduation. P: Consent of instructor. DrPH candidate's completion of all required dissertation research and submission of dissertation in final Committee-approved form.

g. Field experience - 5 s. h.*PUBH 8684 - Field Practicum (5)*

P: Consent of instructor and completion of the DrPH interdisciplinary and concentration core courses. Application of key concepts and principles in public health work settings.

Please note the DrPH is currently under a curriculum revision with implementation beginning Fall 2020.

Appendix B

Table 1. DrPH Foundational Competencies

<p>Data & Analysis</p> <ol style="list-style-type: none"> 1. Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels 2. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue 3. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health <p>Leadership, Management & Governance</p> <ol style="list-style-type: none"> 4. Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners 5. Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies 6. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems 7. Create a strategic plan 8. Facilitate shared decision making through negotiation and consensus-building methods 9. Create organizational change strategies 10. Propose strategies to promote inclusion and equity within public health programs, policies and systems 11. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency 12. Propose human, fiscal and other resources to achieve a strategic goal 13. Cultivate new resources and revenue streams to achieve a strategic goal <p>Policy & Programs</p> <ol style="list-style-type: none"> 14. Design a system-level intervention to address a public health issue 15. Integrate knowledge of cultural values and practices in the design of public health policies and programs 16. Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis 17. Propose interprofessional team approaches to improving public health <p>Education & Workforce Development</p> <ol style="list-style-type: none"> 18. Assess an audience's knowledge and learning needs 19. Deliver training or educational experiences that promote learning in academic, organizational or community settings 20. Use best practice modalities in pedagogical practices
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Table 2. DrPH Environmental and Occupational Health Concentration Competencies

1. Apply the components and functions of conventional and advanced wastewater systems and stormwater treatment technologies, and agriculture best management practices.
2. Apply the "One Health" approach of recognizing the interconnection between animals, humans and their shared environment
3. Apply the appropriateness of exposure assessment methods for different occupational health hazards
4. Apply a system-wide or transdisciplinary approach for preventing and controlling microbial hazards of water and food.
5. Apply an intervention to an environmental or occupational hazard and design method to reduce potential harm associated with identified hazard.
6. Apply basic principles of toxicology to the context of environmental and occupational public health.
7. Interpret results of data analysis for public health research and policy
8. Synthesize and evaluate research on an environmental/occupational public health topic conducted by others

APPENDIX C

Applied Leadership Experience (APE) Assessment

Instructions: As part of the midterm and final evaluation both the student, field preceptor and major professor will complete the self-assessment below. Students must use the table below to reassess their current competency levels and reflect any improvements made as a result of their practicum experience for the foundation and concentration competencies selected in the field practicum. Students must then use a separate page to provide a detailed description of the practicum task/s or deliverable/s that led to achieving Meets Standard or Mastery Achieved for each competency. The field supervisor will separately complete the assessment as well providing description of evidence of achievement through practicum products that provide justification for scoring. The student, field supervisor and course instructor will review together with findings compiled in the evaluations.

Leadership, Management, and Government Competencies	Not Addressed	Meets standard	Mastery Achieved
Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners.			
Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies.			
Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems.			
Create a strategic plan.			
Facilitate shared decision making through negotiation and consensus-building methods.			
Create organizational change strategies.			
Propose strategies to promote inclusion and equity within public health programs, policies and systems.			
Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency.			
Propose human, fiscal and other resources to achieve a strategic goal.			
Cultivate new resources and revenue streams to achieve a strategic goal.			
Apply relevant ethical, legal, and human rights principles to difficult and controversial public health decision-making.			
Apply lean management tools and techniques to resolve operational problems and enact sustainable change.			
Data and Analysis Competencies	Not Addressed	Meets Standard	Mastery Achieved
Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels.			
Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue.			

Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health.			
Develop a fully integrated evaluation of a program or policy that incorporates a plan for both outcome and process evaluation.			
Policy and Programs Competencies	Not Addressed	Meets Standard	Mastery Achieved
Design a system-level intervention to address a public health issue.			
Integrate knowledge of cultural values and practices in the design of public health policies and programs.			
Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis.			
Propose interprofessional team approaches to improving public health.			
Develop evidence-based strategies for changing health law and policy.			
Develop financial and business plans for health programs and services.			
Education and Workforce Development Competencies	Not Addressed	Meets Standard	Mastery Achieved
Assess an audience's knowledge and learning needs.			
Deliver training or educational experiences that promote learning in academic, organizational or community settings.			
Use best practice modalities in pedagogical practices.			

APPENDIX D

**DrPH Integrative Learning Experience (Dissertation) Form
(see attached)**

APPENDIX E

Preceptor Affiliation Agreement Form

**Applied Practical Experience for Doctoral Students (PUBH 8684)
East Carolina University (ECU) Department of Public Health
Doctor of Public Health (DrPH), Environmental and Occupational Health Program**

Spring - Fall (circle one), 20____

This is to confirm that the following East Carolina University DrPH student,

(Student Name – please print)

has conferred with your organization and has been accepted for a field practice placement with the following;

(Organization Name - please print)

(Preceptor Name and Signature)

In order to complete the field placement, the student will begin on _____, 20____ and End on _____, 20____. The student has agreed to participate at least _____ hours per week during this time period.

(Academic Advisor Name and Signature)

(Student Name and Signature)

(DrPH Program Director Name and Signature)

The student will abide by the rules governing ECU's student activities, and the established policies of the accepting organization, when applicable, while adhering and complying to all HIPAA Privacy and Security Guidelines.

The purpose of the DrPH Public Health Field Experience is to provide an opportunity for the student to apply in a public health practice setting, the competencies, knowledge and skills acquired through course work. It requires that the student integrate and synthesize their knowledge and skills through the application of public health theories and principles to the development and implementation of one or special projects in professional public health practice.

Shared Expectations

The Doctor of Public Health graduate program views the field experience as a joint venture with community organizations and agencies that are involved in a public health mission. As part of the agreement to collaborate on the education of future public health professionals, our program and affiliate site agree to fulfill the following expectations as outlined below.

Note: Each item is to be reviewed and initialed by the affiliate organization preceptor, student and academic advisor and approved by the DrPH program director.

The Affiliate Organization criteria

- _____ Provide supervised opportunities for the student to think and act as a public health professional.
- _____ Provide supervised opportunities for the student to pursue and complete a special project relevant to the organization.
- _____ Participate in the development of special objectives, including objectives related to the special project(s).
- _____ Mentor the student towards achieving those objectives. The DrPH advisor and preceptor will approve objectives using the Competency Based Field Experience Objective form (attached).
- _____ Provide mid-term and final evaluation of the student's performance on forms provided by the student's academic advisor or Program Director.
- _____ Provide Office space and resources required for the field experience.

If problems arise, the preceptor is encouraged to contact the student's academic advisor or the Program Director, Dr. Greg Kearney at (252) 744-4039 for assistance as appropriate.

The ECU DrPH Student criteria

- _____ Represent ECU, the graduate program in a professional manner at all times.
- _____ Undertake and complete a special project (identify and include a minimum of three (3) foundational and two (2) concentration specific competencies (see below).
- _____ Complete all requirements for the field experience (oral, written, poster with logic model).
- _____ Maintain ongoing contact with the academic advisor

The Department of Public Health, DrPH Program criteria

- _____ Provide guidance for the special project as deemed appropriate by the preceptor
- _____ Maintain contact with the affiliate site, and visit the site at least once during the field experience
- _____ Provide and support the field affiliate organization and preceptor as requested by the advisor

Contact Information

Student Name _____

Address _____

Telephone _____

eMail _____

Preceptor/Title _____

Organization _____

Address _____

Telephone _____

eMail _____

Advisor _____

Organization _____

Address _____

Telephone _____

eMail _____

Program Director _____

Address _____

Telephone _____

eMail _____

Approval of Proposed Project

including Applied Practical Experience Competencies and Objectives (Jointly completed by student, field preceptor and academic advisor)

Regardless of the amount or level of prior experience, all DrPH students engage in one or more applied practice experiences in which students are responsible for completion of at least one project that is meaningful for an organization and to advanced public health practice (Council on Education for Public Health, CEPH, 2016).

Students are required to complete a total of 400 contact hours for the field experience. Students should select a facet of public health practice that is of interest to the student and appropriate to their program of study and professional goals. In concert with the student's academic advisor and affiliate preceptor (field supervisor) will develop a public health project that is relevant (meaningful) to the organization; select a set of five (5) competencies based, field experience learning objectives to be achieved during the field experience as listed below. Leadership must be included as one of the foundational competencies (leaving 4 additional competencies to select).

Products (required by the student)

Upon completion of the 400-hour APE, the student will be able to do the following:

- Demonstrate mastery of evidence based public health decision making and capacity to translate general and discipline specific empirical knowledge into effective public health practice and solve real-world public health challenges;
- Demonstrate effective communication skills, both oral and in writing;
- Demonstrate leadership, independence, and originality of the project with a significant public health impact;
- Develop a written and oral report summarizing results of the project and recommendations for action.
- Oral presentation to DrPH Committee Members
- Written report to DrPH Academic Advisor

PUBH 8684 Course Learning Objectives (per DrPH student handbook)

As part of the 400-hour APE, the student will carry out the following:

- Apply skills and knowledge gained in coursework in public health agency setting;
- Assess public health competency mastery as evidenced by project guidelines
- Collect data following recognized criteria
- Analyze data, interpret results and communicate with professional/scientific communities.
- Discuss findings with agency and academic members through journal publications/reports etc.

All DrPH students are expected to integrate at least 5 competencies (three foundational and two concentration, see Appendix B) as part of their field experience project(s) and final report and presentation. Leadership must be included as one of the foundational competencies.

Provide a description of Public Health Project: include the objectives of the project and include (3) public health foundational core and (2) concentration competencies that will be addressed (include extra pages if needed).

I. Core Competencies Addressed

(1) Leadership

II. Environmental/Occupational Health Competencies Addressed

Authorizing Agency Representative Name

Date

Student Name

Date

Return attached form to: Greg Kearney, DrPH, MPH
Associate Professor and DrPH EOH Program Director
Department of Public Health
East Carolina University
115 Heart Drive
Greenville, NC 27834
(252) 744-4039



PUBH 8684: DrPH Field Practicum
PRECEPTOR'S EVALUATION: [] Mid-Term [] Final

Thank you for your commitment to ECU, Department of Public Health and your mentorship of our doctoral students! Your evaluation provides valuable insight in assuring that our educational program is preparing students to maintain the highest quality as future leaders in environmental public health.

Student's Name _____ Date prepared _____

Host Organization & Unit _____

Preceptor _____ Phone and e-mail _____

Instructions to Preceptors: *The student is required to select 5 competencies from below. During the field practicum, the student should work in areas of each of the competencies that they have selected. However, the preceptor is strongly encouraged to involve the student broadly in public health activities, both in and outside of their selected competencies (e.g., being involved with high level meetings, field inspections, lab work, outbreaks investigations). As part of the field practicum the student is required to complete 400 hours and should produce a meaningful product(s)/deliverable to your agency or organization (the student will be graded on the deliverable).*

As Preceptor, please rate the student on each of the following competencies or accomplishments as observed by you or another member of your organization asked to supervise the student. Complete this evaluation form after the student has completed 200 hours and at again at completion of the field practicum. To complete the form, using a scale of 1 (weakest) to 5 (strongest) or N/A on whether you think the student has met each of the competencies. If desired, please add comments to the bottom of the form.

Please note that the DrPH core competencies listed below are an accreditation requirement for public health programs by the Council on Education for Public Health (CEPH).

PUBLIC HEALTH CORE COMPETENCIES (STUDENT WILL PICK 3)

RATING

Leadership, Management and Government Competencies

- | | |
|--|---------|
| 1. Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and partners. | () |
| 2. Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies behavior and policies. | () |



PUBH 8684: DrPH Field Practicum
PRECEPTOR'S EVALUATION: [] Mid-Term [] Final

Cont'd.

PUBLIC HEALTH CORE COMPETENCIES (STUDENT WILL PICK 3)

RATING

- | | |
|---|--------|
| 3. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems. | () |
| 4. Create a strategic plan. | () |
| 5. Facilitate shared decision making through negotiation and consensus building methods. | () |
| 6. Create organizational change strategies. | () |
| 7. Propose strategies to promote inclusion and equity within public health programs, policies and systems. | () |
| 8. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency | () |
| 9. Propose human fiscal and other resources to achieve a strategic goal. | () |
| 10. Cultivate new resources and revenue streams to achieve a strategic goal. | () |
| 11. Apply relevant ethical, legal and human rights principal to difficult and controversial public health decision making. | () |
| 12. Apply lean management tools and techniques to resolve operational problems and enact sustainable change. | () |

Data and Analysis Competencies

- | | |
|---|--------|
| 13. Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels. | () |
| 14. Develop a fully integrated evaluation of a program or policy that incorporates a plan for both outcome and process evaluation. | () |

Policy and Program Competencies

- | | |
|--|--------|
| 15. Design a system-level intervention to address a public health issue. | () |
| 16. Integrate knowledge of cultural values and practices in the design of public health policies and programs. | () |
| 17. Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis. | () |
| 18. Propose evidence-based strategies for changing health law and policy. | () |
| 19. Develop financial and business plans for health programs and services. | () |

Education and Workforce Development Competencies

- | | |
|--|--------|
| 20. Assess an audience's knowledge and learning needs. | () |
| 21. Deliver training or educational experiences that promote learning in academic, organizational or community settings. | () |
| 22. Use best practice modalities in pedagogical practices. | () |

Cont'd.

PUBLIC HEALTH ENVIRONMENTAL AND OCCUPATIONAL HEALTH COMPETENCIES (STUDENT WILL PICK 2)

RATING

- | | |
|---|-----|
| 1. Apply the components and functions of conventional and advanced wastewater systems and stormwater treatment technologies, and agriculture best management practices. | () |
| 2. Apply the "One Health" approach of recognizing the interconnection between animals, humans and their shared environment. | () |
| 3. Apply the appropriateness of exposure assessment methods for different occupational health hazards. | () |
| 4. Apply a system-wide or transdisciplinary approach for preventing and controlling microbial hazards of water and food. | () |
| 5. Apply an intervention to an environmental or occupational hazard and design method to reduce potential harm associated with identified hazards. | () |
| 6. Apply basic principles of toxicology to the context of environmental and occupational public health. | () |
| 7. Interpret results of data analysis for public health research and policy. | () |
| 8. Synthesize and evaluate research on an environmental/occupational public health topic conducted by others. | () |

STUDENT'S PERFORMANCE AND ACCOMPLISHMENTS AT AGENCY OR ORGANIZATION

- | | |
|--|-----|
| 1. Participated appropriately in life of organization. | () |
| 2. Respectful and courteous towards others. | () |
| 3. Maintained a positive attitude. | () |
| 4. Achieved general internship goals and objectives. | () |
| 5. Achieved project-related goals and objectives. | () |
| 6. Met expectations of host supervisor(s). | () |
| 7. Completed a meaningful and useful product for the organization. | () |
| 8. Fulfilled minimum 400 clock hour requirement. | () |

Printed Name and Signature of Preceptor _____

Printed Name and Signature of Preceptor _____
(if more than one mentor)

Please feel free to provide any additional comments about the student's performance, accomplishments or concerns. Thank you.

Please e-mail completed form to: kearneyg@ecu.edu or mail to the following;

Greg Kearney, DrPH, MPH, Associate Professor and Program Director, DrPH Environmental and Occupational Health Program
East Carolina University, Brody School of Medicine, Department of Public Health, 115 Heart Drive, Greenville, NC 27834

For any questions please contact the student's preceptor or Dr. Greg Kearney at (252) 744-4039. Thank you.

RESULTS OF APPLIED LEARNING EXPERIENCE
(To be completed by Major Professor)

Student Name _____
Please type or print

Concentration/Track _____

The above student has completed the required APE requirement(s) as checked below:

Applied Learning Experience	Date Held	Passed/Failed
1. Oral Comprehensive Presentation	_____	_____
2. Written Report	_____	_____
3. Reflection Reports (cumulative)	_____	_____

Signature of Major Professor

Major Professor _____

Please return a final copy to the Program Director

Greg Kearney
KearneyG@ecu.edu