

COLLEGE OF PUBLIC HEALTH AND HUMAN SCIENCES

Epidemiology

MPH Handbook

2015-2016



Oregon State
UNIVERSITY

MPH Epidemiology Option
Student Handbook for Oregon State University
2015-2016

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Welcome to the College of Public Health and Human Sciences. Built on a strong foundation of public health – biostatistics, epidemiology, social and behavioral sciences, health policy and management, and environmental health sciences – the College takes a holistic approach to disease prevention and health promotion.

Our College Vision

To ensure lifelong health and well-being for every person, every family, every community.

Our College Mission

Inspired by our mission as a leading land-grant university, we create synergy in teaching, research and outreach to develop the next generation of globally minded public health and human sciences professionals. Through interdisciplinary research and innovative curricula, we advance knowledge, policies and practices that improve population health in communities across Oregon and beyond.

Our College Values

We share the values that guide Oregon State University: Accountability, Diversity, Respect, Responsibility and Truth. To these values, we add our dedication to:

- **Health:** We are committed to advancing lifelong health and well-being for all.
- **Care and Compassion:** With compassion and understanding, we commit to caring for ourselves and others.
- **Innovation:** We embrace innovative approaches to addressing challenges and opportunities.
- **Continuous Improvement:** We continually strive toward high standards by optimizing individual and collective strengths.
- **Cooperation and Collaboration:** We promote a collegial learning and work environment that encourages cooperation, collaboration and active participation.

The Epidemiology option takes full advantage of the many collaborative opportunities of a Land Grant university, while maintaining focus on rigorous training in epidemiologic methods and principles.

The Epidemiology option is designed primarily for those interested in using their epidemiologic skills in applied settings – international health, health departments, non-governmental agencies, or CDC and WHO field programs, but can also be the basis for doctoral training in epidemiology or a complement to other doctoral or professional training.

IMPORTANT: In addition to this handbook, MPH-Epidemiology students must reference the MPH Oregon State University Student General Handbook for information pertaining to policies which apply to ALL students.

GRADUATE SCHOOL: As an MPH Epidemiology student, you must also follow the guidelines and policies of OSU's Graduate School. You will obtain your Program of Study form from the Graduate School. Additionally, the Graduate School offers many activities and enrichment opportunities to further your professional development. (<http://gradschool.oregonstate.edu/>)

Epidemiology Specific Requirements

A. Option Competencies

Upon satisfactory completion of the MPH in the Epidemiology option, students should be able to:

1. Recognize public health problems pertinent to the population and identify key related sources of data.
2. Understand, calculate and apply the basic terms, measures, and methods used in epidemiology.
3. Apply principles of good ethical/legal practice and cultural competency as they relate to study design and data collection.
4. Draw appropriate inferences from epidemiological data including identifying strengths and limitations of reports.
5. Apply epidemiologic skills in the formulation or application of public health programs or policies.
6. Assist in communicating findings and developing recommended evidence-based interventions and control measures in response to epidemiologic findings.

B. Degree Requirements

To complete the MPH degree in the Epidemiology option, students must have a total of at least 61 approved credit hours and successfully complete a final oral exam. These credits include:

- Public Health Core Courses 17
- Required Option Courses 23
- Area of Specialization/Electives 15
- Field Experience (Internship) 6

C. Suggested Course Sequence

Course #	Title	Recommended Sequence	Credits
Public Health Required Core Courses			17
H 512	Intro to Environmental & Occupational Health Sciences	Fall / Yr1 or 2	3
H 524	Introduction to Biostatistics	Fall / Yr1	4
H 525	Principles of Epidemiology	Fall / Yr1	4
H 533	Health Systems Organization	Fall / Yr1 or 2	3
H 571	Principles of Health Behavior	Fall / Yr1 or 2	3
Option Required Courses			23
H 526	Epidemiologic Methods	Winter / Yr1	3
H 580	Linear Regression and Analysis of Time to Event Data	Winter / Yr1	4
H 581	Generalized Linear Models and Categorical Data Analysis	Spring / Yr 1	4
Choose at least 4 courses from list:			
H 551	Applied Epidemiological Analysis of Secondary Data	Winter / Yr 2	3
H 552	Disaster Epidemiology		3
H 554	Epidemiology of Aging		3
H 555	Cancer Epidemiology		3
H 560	Public Health Surveillance (pre-req for H 551)		3
H 562	Infectious Disease Epidemiology		3
H 593	Reproductive Epidemiology		3
H 599	Injury Epidemiology		3

Epidemiology Electives**select 15***Other graduate courses can also be selected as electives with the permission of your advisor*

H 552	Disaster Epidemiology	3
H 554	Epidemiology of Aging	3
H 555	Cancer Epidemiology	3
H 560	Public Health Surveillance	3
H 562	Infectious Disease Epidemiology	3
H 564	Computing Tools and Data Analysis	3
H 566	Data Mining in Public Health	3
H 573	Introduction to Hierarchical/Multilevel Modeling	3
H 578	Introduction to Molecular Epidemiology I	3
H 579	Molecular Epidemiology II	3
H 582	Statistical Analysis of Correlated Health Data	3
H 584	Analytic Methods for Intervention Studies and Clinical Trials	3
H 586	Bayesian Biostatistics in Public Health	3
H 587	Time to Event Analysis of Health Data	3
H 592	Spatial Epidemiology	3
H 593	Reproductive Epidemiology	3
H 599	Injury Epidemiology	
VMB 523	Zoonoses	3
Z499/599	Disease Ecology	

Field Experience **6**

H510	Internship (Field Experience)	Yr 2	6
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Final Oral Exam **Pass**

Final Oral Exam	Spring / Yr 2
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D. Program of Study

As a graduate student, you must file a Program of Study with the Graduate School. The Program of Study is developed under the guidance of the advisor. The form is available online in the Graduate School:

http://oregonstate.edu/dept/grad_school/forms.php.

By the end of your first term, meet with your advisor to plan your elective courses to be taken in subsequent terms. At least 15 weeks before your Final Oral Examination, complete your entire Program of Study, and have it

approved/signed by your advisor and School Co-Director before submitting to the Graduate School.

E. Field Experience (H510)

The field experience internship is a 200-hour professional internship where knowledge from coursework is applied in a real-world setting. This is your opportunity to apply your existing skills and learn new ones by working within the field of epidemiology.

The MPH Internship Coordinator has a database that contains data on field experience sites utilized by students. The database contains information about different opportunities including: agency background information, contact information, specialty option(s) served, and the number of students placed each year.

The internship planning process is described in detail at:

<http://health.oregonstate.edu/internships>

Faith Vawter is the MPH Internship coordinator (Telephone: 541-737-4891 Email: Faith.Vawter@oregonstate.edu). You will work with her and your advisor as you prepare for your internship.

MPH Program Minimum Standards for Internship

In addition to meeting the professional experience criteria, all MPH internship experiences must meet the following:

- Preceptor experience: Preceptor may not be program faculty member or advisor. Preceptors must have public health credentials or appropriate health related credentials and experience to provide appropriate mentorship/supervision in your learning experience. All site preceptors and sites will be assessed on a case-by-case basis.
- Competency-based: Internship must meet option and student-specified competencies. Competencies and scope of the internship are pre-approved by advisor and MPH Internship Coordinator. Competency mastery is evaluated by both student and preceptor.
- Community or population focus: Internship experience is a professional experience within a public or private sector organization that can influence workplace, community, or population health (e.g., public health

agency, health care delivery, reimbursement, community organizing, health voluntary, population-based research, worksite setting).

- Duration: Minimum of 200 practice hours (6 units)

F. Minimum Standards for Internship

In addition to meeting the MPH Program Minimum Standards for internships, students in the Epidemiology option must meet the following requirements:

- Students will have completed all or most of the required courses before beginning an internship and have written consent from their faculty advisor.
- Students must complete an Application and Learning Contract, Advisor Approval Form, Internship Coordinator Signature Form, Preceptor Signature Form, and Request for "To Be Arranged" Course Form which must be received by the MPH Internship Coordinator prior to the start of internship.

As part of their internship applications, students work with their advisor to:

- develop appropriate learning competencies for the internship and document them in the internship application,
- describe how their area of emphasis, internship, and career objectives are connected,
- demonstrate that the placement is competency-based including opportunities to develop Epidemiology Option Competencies, and
- seek placements in public and/or private sector organizations with qualified preceptors in the area of epidemiology.

Students must maintain an ongoing internship/organizational experience journal, submit bi-weekly progress reports, a final summary of their work in the practice setting, and an evaluation of the internship site. These reports must be submitted to the MPH Internship Coordinator.

- In their final reports (see Section G), students must describe and evaluate the degree to which they demonstrated their individual and Epidemiology Option learning competencies during their practical.

Preceptors must evaluate the degree to which students accomplished the stated individual and option learning competencies, using a Likert-scale

instrument provided in the MPH Student General Handbook. This evaluation form must be submitted to the MPH Internship Coordinator.

G. Culminating Experience - Final Oral Exam

Upon completion of all required coursework and the internship experience, all MPH students must schedule a final oral examination. The student's Program of Study must be filed with the Graduate School, all required coursework and the internship must be completed before taking the exam. Students must receive approval to take the exam from their academic advisors. All deviations from policy must be approved by the Epidemiology Program Coordinator.

Purpose

The Graduate School at OSU requires all students in a graduate degree-seeking program to participate in a final oral examination. The purpose of the oral examination is to provide students with an opportunity to integrate their educational experiences and draw from coursework and the internship to respond to substantive, methodological, and theory-based questions. In conjunction with the internship, the exam is designed to test the Epidemiology Option competencies and to provide the student an opportunity to assess their mastery of the competencies.

Committee

The exam committee will be comprised of three faculty members, including the student's advisor and two additional members who are faculty of the College. Students should discuss the procedure for creating committees with their faculty advisor or the Epidemiology Program Coordinator.

Final Report

One week prior to the exam the student should distribute via email a copy of their internship report to the committee. This report may be used by faculty in order to frame exam questions. (The student will not be evaluated by the quality and/or content of the report.)

Presentation/Oral Exam Format

On the exam day, the student should plan to pick up a hard copy of the examination questions from their advisor. The student will have one hour to organize their thoughts and prepare for the exam. The student may NOT use any resources during this preparation time, including notes, textbooks, the internet, and other people. The only materials allowed during the preparation time are paper and pen/pencil. At the completion of the preparation hour, the student's advisor will accompany the student to the examination room.

The oral exam will start with a brief (15 minute) presentation of the epidemiological work completed by the student during their internship (e.g. development of data surveillance tool; implementation of data management system; data analyses). The presentation will be followed by the examination questions, with the entire culminating experience lasting approximately 2 hours.

Assigning Grade

Students will be assigned a "pass" or "fail" grade. A grade of "pass" means that the student has responded to the exam questions satisfactorily. If the student receives a grade of "fail" on their examination, faculty must provide specific comments, feedback, and suggestions for improvement. Failure of the examination may result in additional coursework, remedial assignments or readings, prior to retaking the examination. Students will be allowed **one** retake of the examination, which will include new questions and follow the same procedures as above. The examination may be retaken no sooner than 10 weeks (one full academic term) after the date of the failed exam.

If the student fails the second oral examination, the student will be terminated from the MPH program.

Epidemiology MPH Student Advising Sheet

Student Name _____ Today's Date _____

Term Matriculated _____ Expected Graduation _____

Student ID _____ ONID e-mail _____

MPH Core Requirements (17)	Credits	Term	Grade
H 512 Introduction to Environmental & Occupational Health Sciences	3		
H 524 Introduction to Biostatistics	4		
H 525 Principles of Epidemiology	4		
H 533 Health Systems Organization	3		
H 571 Principles of Health Behavior	3		
Option Required Courses (23)	Credits	Term	Grade
H 526 Epidemiologic Methods	3		
H 580 Linear Regression and Analysis of Time to Event Data	4		
H 581 Generalized Linear Models and Categorical Data Analysis	4		
Option Electives (15)	Credits	Term	Grade
Field Experience (6)	Credits	Term	Grade
H 510 Internship (Field Experience)	6		

Total Credits _____

Please use the space below to note any special arrangements where course substitutes have been approved: