



**Epidemiology  
(EPI)**

**Oregon State University  
MPH - EPI Track  
Student Handbook**

**2010-2011**





**2010-2011 OMPH Epidemiology Track  
Student Handbook for Oregon State University  
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## 2010-2011 OMPH Program Student Handbook Oregon State University

### Epidemiology Track

**I. IMPORTANT:** In addition to this handbook, OSU MPH EPI track students *must reference* the Master of Public Health Oregon State University Student Handbook for information pertaining to ALL students

### II. OSU Epidemiology (EPI) Track Specific Requirements

#### A. EPI Track Competencies

The goal of the Epidemiology Track is to prepare graduates for work in local, state and federal Public Health agencies, for profit and not for profit health related agencies, industrial and commercial epidemiology programs. For those who wish to continue their training, graduates will be prepared to pursue doctoral degrees in epidemiology or related public health fields. The Track curriculum builds on the core epidemiology competencies developed by the Association of Schools of Public Health and incorporates those established by the CDC Council of State and Territorial Epidemiologists for applied epidemiology. Upon satisfactory completion of the MPH Epidemiology Track, 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 indentifying 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. EPI Track Degree Requirements

Completing the MPH degree in the **Epidemiology Track** at OSU requires:

1. A total of at least 60 approved credit hours. These credits include:
  - a. OMPH Core courses 16
  - b. Required Track courses 26
  - c. Epidemiology Elective courses at least 12 (12-15)
  - d. Field Experience 6
2. Students must maintain a minimum 3.0 (B) grade point average in their graduate courses. Additionally, students may not receive lower than a B- in any required

courses (core or track required courses). If lower than a B- is received then the student will need to retake the course.

3. Successful completion of Field Experience
4. Successful completion of final oral exam

The following courses are required in the Epidemiology Track:

Track Competency	Courses	Links to Program Learning Competencies (PLC)
1. Recognize public health problems pertinent to the population and identify key related sources of data	<b>H 525 Principles &amp; Practices of Epidemiology</b> <b>H 533 Health Systems Organization</b> <b>H 512 Environmental and Occupational Health</b> <b>H 571 Principles of Health Behavior</b> H 526 Epidemiologic Methods H 599 Advanced Epidemiologic Methods H 599 Epidemiology for Public Health Practice (3) H 599 Chronic Disease Epidemiology (3) H 599 Infectious Disease Epidemiology (3) H 599 Public Health Surveillance (3) H 510 Internship & Presentation (6)	PLC #1 PLC #2 PLC #3 PLC #6 PLC #7
2. Understand, calculate and apply the basic terms, measures, and methods used in epidemiology.	<b>H 525 Principles &amp; Practices of Epidemiology</b> <b>H 524 Introduction to Biostatistics (4)</b> H 526 Epidemiological Methods (3) H 599 Advanced Epidemiologic Methods (3) HDF5 531 Research in Human Development and Family Sciences II (4) (Multiple Linear Regression) HDF5 532 Research in Human Development and Family Sciences III (4) (ANOVA) H 510 Internship & Presentation (6)	PLC #2 PLC #4
3. Apply principles of good ethical/legal practice and cultural competency as they relate to study design and data collection.	H 510 Internship & Presentation <b>H 512 Environmental and Occupational Health</b> <b>H 525 Principles &amp; Practices of Epidemiology</b> H 526 Epidemiologic Methods H 599 Advanced Epidemiologic Methods H 599 Epidemiology for Public Health Practice (3) H 599 Chronic Disease Epidemiology (3) H 599 Infectious Disease Epidemiology (3) H 599 Public Health Surveillance (3)	PLC #1 PLC #2 PLC #4 PLC #5 PLC #6
4. Draw appropriate inferences from epidemiological data	<b>H 525 Principles &amp; Practices of Epidemiology</b> H 526 Epidemiologic Methods H 599 Advanced Epidemiologic Methods	PLC #1 PLC #2 PLC #4

including indentifying strengths and limitations of reports	H 599 Epidemiology for Public Health Practice (3) H 599 Chronic Disease Epidemiology (3) H 599 Infectious Disease Epidemiology (3) H 599 Public Health Surveillance (3) H 510 Internship & Presentation <b>H 524 Introduction to Biostatistics (4)</b> HDFS 531 Research in Human Development and Family Sciences II (Multiple Linear Regression) (4) HDFS 532 Research in Human Development and Family Sciences III (4) (ANOVA) <b>H 533 Health Systems Organization</b>	PLC #7
5. Apply epidemiologic skills in the formulation or application of public health programs or policies	<b>H 525 Principles &amp; Practices of Epidemiology</b> H 526 Epidemiologic Methods H 599 Advanced Epidemiologic Methods H 599 Epidemiology for Public Health Practice (3) H 599 Chronic Disease Epidemiology (3) H 599 Infectious Disease Epidemiology (3) H 599 Public Health Surveillance (3) H 510 Internship & Presentation (6) <b>H 512 Environmental and Occupational Health (3)</b>	PLC #1 PLC #2 PLC #3 PLC #4 PLC #7
6. Assist in communicating findings and developing recommended evidence-based interventions and control measures in response to epidemiologic findings.	<b>H 525 Principles &amp; Practice of Epidemiology</b> H 526 Epidemiologic Methods H 599 Advanced Epidemiologic Methods H 599 Epidemiology for Public Health Practice (3) H 599 Chronic Disease Epidemiology (3) H 599 Infectious Disease Epidemiology (3) H 599 Public Health Surveillance (3) H 510 Internship & Presentation <b>H 512 Environmental and Occupational Health</b>	PLC #1 PLC #3 PLC #4 PLC #7

Note: **Bold** courses are OMPH core courses.

**COURSE REQUIREMENTS Epidemiology Track (60 credits):**

**MPH CORE COURSES (16 credits)**

- H 512 Environmental and Occupational Health (3 credits)
- H 524 Introduction to Biostatistics (4 credits)
- H 525 Principles and Practice of Epidemiology (3 credits)
- H 533 Organization, Financing and Delivery of Health Care (3 credits)
- H 571 Principles of Health Behavior (3 credits)

**Required Epidemiology Track Core Courses (26 credits)**

- H 526 Epidemiological Methods (3 credits)
- \*H 599 Epidemiology III (3) or Advanced Epidemiology (3 credits)



HDFS 531 Research in Human Development and Family Sciences II (4 credits) (Multiple Linear Regression)

HDFS 532 Research in Human Development and Family Sciences III (4 credits) (ANOVA)

\*H 599 Epidemiology for Public Health Practice (3 credits)

\*H 599 Chronic Disease Epidemiology (3 credits)

\*H 599 Infectious Disease Epidemiology (3 credits)

\* H 599 Public Health Surveillance (3 credits)

**Recommended Electives (choose a minimum of 12 credits)**

H 570 Workflow of Data Analysis (3 credits)

\*H 599 Environmental/Occupational Epidemiology (3 credits)

\*H 599 Social Epidemiology (3 credits)

\*H 599 Current issues in Epidemiology (2 credits)

EXSS 699 Physical Activity Epidemiology (3 credits)

H 515 Research Methods in Health and Safety (3 credits)

H 575 Evaluation of Health Promotion and Education Programs (3 credits)

H 529 International Health (3 credits)

\*H 599 Principles of Intervention Studies and Clinical Trials (3 credits)

H 518 Public Health Ethics and Issues (3 credits)

Courses may be chosen from one of the MPH tracks with approval of the student’s advisor and the epidemiology track coordinator.

**H 510 Internship (6 credits)**

**Final Oral Examination: A final oral examination is required by all students in the Epidemiology Track.**

**C. EPI Sample Course Sequence**

It is recommended that OMPH courses be taken in a particular sequence to maximize the educational experience. Always consult your advisor regarding your program of study to determine the schedule that fits best for you. The following shows a typical recommended sequence of courses.

**Recommended course schedule\* for required classes taken at OSU in the Epidemiology Track**

Year	Fall	Winter	Spring	Summer
First	<b>Required:</b> <b>H524 Introduction to Biostatistics</b> <b>H525 Principles and Practice of Epidemiology</b>	H526 Epidemiologic Methods		

	<i>Recommended depending on desired course load:</i>			
	<b>H512 Environmental and Occupational Health</b> <b>H533 Health Systems Organization</b> <b>H571 Principles of Health Behavior</b>			
Second	H515 Research Methodology in Health and Safety		H510 Internship	

Note: courses in bold are OMPH core courses.

\* *Some of these courses are not offered every year. Check the class schedules on-line and in the Department for current course listings.*

This is not an exhaustive list of graduate courses in the Department of Public Health. Please check with your advisor about other elective courses in this department and in other departments.

#### D. EPI Track Field Experience

##### Program Minimum Standards for Field Experiences

In addition to meeting track field experience criteria, all OMPH field/organizational experiences must meet the following:

- Precepted 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, meeting track and student-specified competencies
- Competencies and field experience site/work scope are pre-approved by advisor
- Evaluated by both student and preceptor, demonstrating competency mastery
- Community or population focus (e.g., public health agency, health care delivery, reimbursement, community organizing, health voluntary, population-based research, worksite setting)
- Minimum of 200 practice hours, 6 units for Health Promotion, Health Management and Policy, International Health, Environment, Safety & Health, Community & Public Health Nursing; Minimum 100 hours plus a practice-based report for Epidemiology/Biostatistics.

(Policy approved by OMPH Coordinating Council and Track Coordinators Committee 2-1-05; revision approved 6/11/08)

## **E. EPI Minimum Standards for Field Experience**

In addition to meeting the OMPH Program Minimum Standards for field experiences, internships for students in the Epidemiology Track must meet the following requirements:

- Students must complete all required courses before beginning an internship or have written consent from their faculty advisor.
- Students must complete an internship application, which must be approved by their major professor/advisor prior to the start of placement.
- As part of their internship applications:
  - Students must develop appropriate learning competencies for the internship and document them in the internship application.
  - Students must describe how their area of emphasis, internship, and career objectives are connected.
  - Students must be able to demonstrate that the placement is competency-based including opportunities to develop Track Competencies #1-6.
- Students may seek placements in public and/or private sector organizations with qualified preceptors in the area of Epidemiology.
- Students must submit both bi-weekly progress reports and a final summary of their work in the practice setting. These reports must be accepted by students' faculty advisors.
  - In their final reports, students must describe and evaluate the degree to which they demonstrated their individual and Track learning competencies during their practica.
- Preceptors must evaluate the degree to which students accomplished the stated individual and Track learning competencies, using a Likert-scale instrument provided in the ESH Internship Handbook. This evaluation form must be submitted to the student's faculty advisor.

## **F. Culminating Experience: Final Oral Examination.**

A final oral examination is required by all students in the Epidemiology Track.

The culminating experience for the proposed track is the same as for all MPH tracks offered at OSU. Upon completion of all required coursework and the internship experience, all MPH students must schedule a final oral examination. (Note: 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 Track Coordinator.

### *Purpose*

The Graduate School at Oregon State University 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 Environment, Safety, and Health track competencies and to provide the student an opportunity to assess his or her mastery of the competencies.

### *Format*

The examination will last approximately 2-3 hours. Student will give an oral presentation of their internship experience and committee members and guests will be present. At the conclusion of the general presentation all visitors will be asked to leave and the oral examination will continue with only the committee members and the student present. Questions will focus on the program, internship, and track 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 Department (OSU). Students should discuss the procedure for creating committees with their faculty advisor, graduate coordinator, or the Track Coordinator.

### *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 OMPH program.



**III. Epidemiology Student Advising Sheet**

**OSU Student Advising Sheet  
Epidemiology Track**

**Student** \_\_\_\_\_ **Today's Date** \_\_\_\_\_

**Date Entered School** \_\_\_\_\_ **Expected Graduation** \_\_\_\_\_

**Address** \_\_\_\_\_ **Phone** \_\_\_\_\_

**Email** \_\_\_\_\_ **ID#** \_\_\_\_\_

**Oregon MPH Core Courses** (16 credits)  
**Required International Health Track Core Courses** (minimum of 26 credits)  
**Area of Focus in Epidemiology** (12-15 credits)  
**Total: 60 Credits**

<b>MPH Core Requirements (16 credits)</b>	Term	Grade
H512 Environmental and Occupational Health (3 credits)		
H525 Principles and Practices of Epidemiology (3 credits)		
H524 Introduction to Biostatistics (4 credits)		
H533 Health Systems Organization (3 credits)		
H571 Principles of Health Behavior (3 credits)		
<b>Total</b> _____		

<b>Required Epidemiology Track Core Courses (minimum of 26 credits)</b>	Term	Grade
H 526 Epidemiological Methods (3 credits)		
*H 599 Epidemiology III (3 credits) or Advanced Epidemiology		
HDFS 531 Research in Human Development and Family Sciences II (4 credits) (Multiple Linear Regression)		
HDFS 532 Research in Human Development and Family Sciences III (4 credits) (ANOVA)		
*H 599 Epidemiology for Public Health Practice (3 credits)		
*H 599 Chronic Disease Epidemiology (3 credits)		
*H 599 Infectious Disease Epidemiology (3 credits )		
*H 599 Public Health Surveillance (3 credits )		
<b>Total</b> _____		

<b>Recommended Electives (choose a minimum of 12 credits)</b>		Term	Grade
H 570 Workflow of Data Analysis (3 credits )			
*H 599 Environmental/Occupational Epidemiology (3 credits )			
*H 599 Social Epidemiology (3 credits )			
*H 599 Current Issues in Epidemiology (2 credits )			
EXXS 699 Physical Activity Epidemiology (3 credits )			
H 515 Research Methods in Health and Safety (3 credits )			
H 575 Evaluation of Health Promotion and Education Programs (3 credits)			
H 529 International Health (3 credits)			
H 599 Principles of Intervention Studies and Clinical Trials (3 credits)			
H 518 Public Health Ethics and Issues (3 credits)			
			<b>Total _____</b>
<b>H 510 Internship/Field Experience (6 credits)</b>			
<b>Total _____</b>			

List Elective courses:

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Please note any special arrangements where course substitutes have been approved.  
Provide details:

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## NOTES