

MPH in Biostatistics Clinical Research Emphasis Academic Year 2011-2012

The MPH in Biostatistics curriculum is constructed so that students are able to choose either an emphasis in biometry or clinical research depending on their interests. There are excellent career opportunities for students wishing to pursue positions in local, state, and federal health agencies, health and medical centers, health care and clinical research institutions, the healthcare/pharmaceutical industry, and consulting. Applicants to this program are expected to have a background in college algebra and calculus.

Clinical Research Emphasis (48 Semester Credit Hours)

The clinical research emphasis is primarily designed for those who are currently working in the health care professions. The program is for professionals who wish to prepare for roles in clinical research, health care research, medical database management, or statistical consulting in medical or public health settings. The emphasis is oriented toward applied clinical research, outcome measurement, and applied biostatistics. Students in the clinical research emphasis will complete a minimum of 48 semester credit hours to earn the MPH degree. By the conclusion of the MPH program, a student in clinical research emphasis will be able to:

1. Conduct experimental research in public health such as community trials and clinical trials in collaboration with other health professionals.
2. Communicate findings of the analysis and solution of a problem of health care and public health importance in professional journals.
3. Analyze and solve public health issues by applying statistical methodology.
4. Assist in the planning, development, and evaluation of health systems using biostatistics procedures.
5. Plan and conduct independent research focusing on the analysis and solution of a problem in public health practice.
6. Assist in the planning, development, and evaluation of treatment outcome data collection in a broad array of health care facilities.

CORE COURSES:

15 SCH

BIOS	5300	Biostatistics for Public Health 1	3 SCH
EOHS	5300	Environmental Health	3 SCH
EPID	5300	Principles of Epidemiology	3 SCH
HMAP	5300	Introduction to Health Management and Policy	3 SCH
SABS	5300	Theoretical Foundations of Individual & Community Health	3 SCH

REQUIRED COURSES:

9 SCH

BIOS	5310	Biostatistics for Public Health 2	3 SCH
BIOS	5312	Regression Analysis	3 SCH
BIOS	6318	Clinical Trials and Survival Analysis	3 SCH

PRACTICE EXPERIENCE: 3 SCH

BIOS 5397 Public Health Practice Experience 3 SCH

NON-BIOSTATISTICS LOWER-LEVEL ELECTIVE COURSES (Choose 2 courses): 6 SCH

EOHS 5340 Exposure and Risk Assessment 3 SCH

EPID 5310 Intermediate Epidemiology (prerequisite for EPID 5314) 3 SCH

EPID 5314 Applied Data Analysis in Epidemiology 3 SCH

EPID 5318 Chronic Disease Epidemiology 3 SCH

EPID 5320 Infectious Disease Epidemiology 3 SCH

NON-BIOSTATISTICS UPPER-LEVEL ELECTIVE COURSES (Choose 1 course): 3 SCH

EPID 6314 Experimental Methods in Epidemiology 3 SCH

HMAP 6380 Health Service Research 1 3 SCH

SABS 6310 Qualitative Research Methods 3 SCH

BIOSTATISTICS ELECTIVE COURSES (Choose 4 courses): 12 SCH

BIOS 5316 Nonparametric Statistical Methods 3 SCH

BIOS 5320 Analysis of Variance 3 SCH

BIOS 5314 Introduction to Statistical Packages (prerequisite for EPID 5314) 3 SCH

BIOS 5324 Data Management 3 SCH

BIOS 5399 Independent Study in Biostatistics 1-3 SCH

BIOS 6391 Topics in Biostatistics 1-3 SCH

BIOS 6320 Biostatistical Research and Consulting 3 SCH

- Students may substitute an elective course not on this list only with prior written approval of their advisor.
- Courses not approved as substitutes will not be applied toward the degree plan.

CULMINATING EXPERIENCE: 0 SCH

BIOS 5000 MPH Comprehensive Examination 0 SCH

- Upon approval by the student's advisor and the department chair, students may elect to complete a Thesis for the culminating experience. In this case, students will take 6 SCH of "BIOSTATISTICS ELECTIVES" coursework and 6 SCH of Thesis.

MPH – BIOSTATISTICS (CLINICAL RESEARCH)

RECOMMENDED SEQUENCE OF COURSEWORK*

(BASED ON FALL ADMISSIONS; ASSUMES COMPREHENSIVE EXAM FOR CULMINATING EXPERIENCE)

TWO-YEAR CURRICULUM

FALL SEMESTER		12 SCH	(YEAR 1)
BIOS	5300	Biostatistics for Public Health 1	
EPID	5300	Principles of Epidemiology	
HMAP	5300	Introduction to Health Management & Policy	
SABS	5300	Theoretical Foundations of Ind. & Comm. Hlth.	
SPRING SEMESTER		12 SCH	(YEAR 1)
BIOS	5310	Biostatistics for Public Health 2	
		Elective	
		Elective	
		Elective	
SUMMER SEMESTER		3 SCH	(YEAR 1)
BIOS	5397	Public Health Practice Experience	
FALL SEMESTER		12 SCH	(YEAR 2)
EOHS	5300	Environmental Health	
BIOS	5312	Regression Analysis	
		Elective	
		Elective	
SPRING SEMESTER		9 SCH	(YEAR 2)
BIOS	5000	MPH Comprehensive Examination	
BIOS	6318	Clinical Trials and Survival Analysis	
		Elective	
		Elective	

THREE-YEAR CURRICULUM

FALL SEMESTER		6 SCH	(YEAR 1)
BIOS	5300	Biostatistics for Public Health 1	
EPID	5300	Principles of Epidemiology	
SPRING SEMESTER		6 SCH	(YEAR 1)
BIOS	5310	Biostatistics for Public Health 2	
		Elective	
SUMMER SEMESTER		6 SCH	(YEAR 1)
HMAP	5300	Introduction to Health Management & Policy	
SABS	5300	Theoretical Foundations of Ind. & Comm. Hlth.	
FALL SEMESTER		6 SCH	(YEAR 2)
BIOS	5312	Regression Analysis	
		Elective	
SPRING SEMESTER		6 SCH	(YEAR 2)
		Elective	
		Elective	
SUMMER SEMESTER		6 SCH	(YEAR 2)
BIOS	5397	Public Health Practice Experience	
EOHS	5300	Environmental Health	
FALL SEMESTER		6 SCH	(YEAR 3)
		Elective	
		Elective	
SPRING SEMESTER		6 SCH	(YEAR 3)
BIOS	5000	MPH Comprehensive Examination	
BIOS	6318	Clinical Trials and Survival Analysis	
		Elective	

*THE MPH COMPREHENSIVE EXAM IS ONLY OFFERED IN THE SPRING AND FALL SEMESTERS.

*THE RECOMMENDED SEQUENCE OF COURSEWORK REFLECTS REQUIRED COURSES THAT ARE GUARANTEED TO BE OFFERED IN THE ABOVE STATED SEMESTERS (EXCLUDES ELECTIVES). STUDENTS WHO ADHERE TO THE SEQUENCE OF COURSEWORK RECOMMENDED IN THE 2 OR 3 YEAR CURRICULUM PLAN ARE GUARANTEED TO GRADUATE WITHIN THE TIME FRAME INDICATED ABOVE.

MPH – BIOSTATISTICS (CLINICAL RESEARCH)

RECOMMENDED SEQUENCE OF COURSEWORK*

(BASED ON SPRING ADMISSIONS; ASSUMES COMPREHENSIVE EXAM FOR CULMINATING EXPERIENCE)

TWO-YEAR CURRICULUM

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BIOS	5300	Biostatistics for Public Health 1	
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HMAP	5300	Introduction to Health Management & Policy	
SABS	5300	Theoretical Foundations of Ind. & Comm. Hlth.	
SUMMER SEMESTER		6 SCH	(YEAR 1)
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EOHS	5300	Environmental Health	
FALL SEMESTER		9 SCH	(YEAR 1)
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		Elective	
		Elective	
SPRING SEMESTER		9 SCH	(YEAR 2)
BIOS	6318	Clinical Trials and survival Analysis	
		Elective	
		Elective	
SUMMER SEMESTER		9 SCH	(YEAR 2)
BIOS	5397	Public Health Practice Experience	
FALL SEMESTER		12 SCH	(YEAR 2)
BIOS	5000	MPH Comprehensive Examination	
		Elective	
		Elective	
		Elective	

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BIOS	5300	Biostatistics for Public Health 1	
EPID	5300	Principles of Epidemiology	
SUMMER SEMESTER		6 SCH	(YEAR 1)
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FALL SEMESTER		6 SCH	(YEAR 1)
BIOS	5312	Regression Analysis	
EPID	5313	Elective	
SPRING SEMESTER		6 SCH	(YEAR 2)
BIOS	6318	Clinical Trials and survival Analysis	
		Elective	
SUMMER SEMESTER		6 SCH	(YEAR 2)
EOHS	5300	Environmental Health	
SABS	5300	Theoretical Foundations of Ind. & Comm. Hlth.	
FALL SEMESTER		6 SCH	(YEAR 2)
		Elective	
		Elective	
SPRING SEMESTER		6 SCH	(YEAR 3)
		Elective	
		Elective	
SUMMER SEMESTER		3 SCH	(YEAR 3)
BIOS	5397	Public Health Practice Experience	
FALL SEMESTER		3 SCH	(YEAR 3)
BIOS	5000	MPH Comprehensive Examination	

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