MPH in Clinical Research

The Master of Public Health (M.P.H.) degree in clinical research 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 Master of Public Health (M.P.H.) is oriented toward applied clinical research, outcome measurement, and applied biostatistics. For the culminating experience, students may choose between a thesis or a comprehensive exam. Students selecting the comprehensive exam option must take an additional six (6) semester credit hours of electives in lieu of the thesis. By the conclusion of the M.P.H. program, a student in the clinical research concentration 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. Conduct biostatistical research as applied to health care and public health issues.
3. Assist in the planning, development and evaluation of health systems and programs using biostatistical procedures.
4. Assist in the planning, development and evaluation of treatment outcome data collection in a broad array of health care facilities.
5. Analyze and solve a public health issue by applying statistical methodology.
6. Communicate findings of the analysis and solution of a problem of health care and public health importance of professional journals.
7. Plan and conduct independent research focusing on the analysis and solution of a problem in public health practice.

### Biostatistics Curriculum (45 SCH)

**CORE COURSES: 15 SCH**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>SCH</th>
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<tbody>
<tr>
<td>BIOS 5210</td>
<td>Biostatistics for Public Health I</td>
<td>3</td>
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<tr>
<td>ENVR 5300</td>
<td>Environmental Health</td>
<td>3</td>
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<tr>
<td>EPID 5100</td>
<td>Principles of Epidemiology</td>
<td>3</td>
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<tr>
<td>HMAP 5210</td>
<td>Introduction to Health Management and Policy</td>
<td>3</td>
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<tr>
<td>SCBS 5110</td>
<td>Behavioral and Social Aspects of Public Health</td>
<td>3</td>
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**REQUIRED COURSES: 12 SCH**

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<tr>
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<tbody>
<tr>
<td>BIOS 5215</td>
<td>Biostatistics for Public Health II</td>
<td>3</td>
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<tr>
<td>BIOS 5730</td>
<td>Regression Analysis</td>
<td>3</td>
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<tr>
<td>BIOS 5735</td>
<td>Analysis of Variance</td>
<td>3</td>
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<tr>
<td>BIOS 6775</td>
<td>Clinical Trials and Survival Analysis</td>
<td>3</td>
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PRACTICE EXPERIENCE:  3 SCH (to be eligible for enrollment, students must complete all core courses and at least two required courses)
SPH  5855   Public Health Practice Experience  3 SCH

ELECTIVE COURSES:  9 SCH for Thesis option or 15 SCH for Comprehensive Exam option
BIOS  5700   Mathematical Statistics  3 SCH
BIOS  5720   Survey Sampling  3 SCH
BIOS  5760   Data Management  3 SCH
BIOS  5910   Independent Study in Biostatistics  1-3 SCH
BIOS  6750   Applied Categorical Data Analysis  3 SCH
BIOS  6760   Multivariate Analysis  3 SCH
BIOS  6785   Biostatistical Research and Consulting  3 SCH
EPID  5400   Applied Data Analysis in Epidemiology  3 SCH
EPID  5610   Chronic Disease Epidemiology  3 SCH
EPID  5630   Infectious Disease Epidemiology  3 SCH
HMAP  6200   Organizational Management  3 SCH
HMAP  6225   Quality Management in Long-term Care  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:  0-6 SCH
SPH  5950   Thesis  6 SCH
Or
Comprehensive Exam (see details below)  0 SCH

Students who select the comprehensive exam option do not register for a course in order to take the exam; however, they must complete six (6) additional semester credit hours of electives. The exam covers material from four courses: BIOS 5210: Biostatistics for Public Health I; BIOS 5215: Biostatistics for Public Health II; BIOS 5730: Regression Analysis; and BIOS 5735: Analysis of Variance. In order to take the exam, a student must have a grade point average of 3.0 or higher in graduate level biostatistics courses. The exam is given during the first week of April each year. Students are responsible for informing the Department of Biostatistics of their intentions to take the exam. A student who encounters a last minute emergency (sickness, death in the family, etc.) may appeal to the exam committee for an opportunity to take a makeup exam. Students who fail the exam may, upon recommendation of the committee, be allowed to retake a different exam. However, an opportunity for retaking the exam is not automatic.

Updated 8/1/07