2.3 Public Health Core Knowledge. All graduate professional public health degree students must complete sufficient coursework to attain depth and breadth in the five core areas of public health knowledge. The areas of knowledge basic to public health include the following:

Biostatistics – collection, storage, retrieval, analysis and interpretation of health data; design and analysis of health-related surveys and experiments; and concepts and practice of statistical data analysis;

Epidemiology – distributions and determinants of disease, disabilities and death in human populations; the characteristics and dynamics of human populations; and the natural history of disease and the biologic basis of health;

Environmental health sciences – environmental factors including biological, physical and chemical factors that affect the health of a community;

Health services administration – planning, organization, administration, management, evaluation and policy analysis of health and public health programs; and

Social and behavioral sciences – concepts and methods of social and behavioral sciences relevant to the identification and solution of public health problems.

As stated in the mission of the Graduate Programs in Public Health, we are “committed to developing leaders who can translate knowledge into policy and practice to promote health and prevent disease in human populations”. The Graduate Programs in Public Health requires all MPH and MSPH students to have fundamental competence in the areas of knowledge basic to public health. This is achieved, in part, through completion of a series of required competency-based core courses.

Table 2.3.a outlines the course numbers, credits, and course titles required of all MPH and MSPH students. For the academic MSPH degree, the biostatistics requirement differs from the professional MPH degree. Both the MPH and MSPH are generalist public health degrees, however advanced coursework in all five areas basic to public health is available for elective course requirements.

Courses offered in the five core areas of public health are reviewed by the Curriculum Committee and Graduate Programs administration on a regular basis and updated (or equivalent substitution courses are added) as needed to keep current with professional guidelines in each appropriate field of public health.

\[
a. \text{Identification of the means by which the program assures that all graduate professional public health degree students have fundamental competence in the areas of knowledge basic to public health. If this means is common across the program, it need be described only once. If it varies by degree or specialty area, sufficient information must be provided to assess compliance by each. See CEPH Data Template 2.3.1.}
\]
Given the varied statistical background of our entering MPH and MSPH students, we have developed a non-credit, on-line biostatistics course. Based on a student’s performance on the pre-test, tutorials are recommended to refresh their statistical skills. Included are on-line quizzes, webinars, and on-line office hours. Seth Schwartz, an Associate Professor in our department, works with each student to ensure that they are all prepared for the rigors of EPH 501, Medical Biostatistics I.

For the health services administration and the behavioral sciences/health education requirements students have the option to choose between two courses to meet these core knowledge areas.

Table 2.3.a.: Curriculum Map for Knowledge Basis to Public Health

<table>
<thead>
<tr>
<th>Core Knowledge Area</th>
<th>Course Number and Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross cutting</td>
<td>EPH 500 Introduction to Public Health*</td>
<td>3</td>
</tr>
<tr>
<td>Biostatistics</td>
<td>EPH 501 Medical Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EPH 502 Medical Biostatistics II**</td>
<td>3</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>EPH 521 Fundamentals of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>EPH 541 Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>Health Services Administration</td>
<td>EPH 631 Public Health Administration -- OR --</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EPH 632 US Health Systems</td>
<td></td>
</tr>
<tr>
<td>Behavioral Sciences/Health Education</td>
<td>EPH 520 Health Education and Behavior -- OR --</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EPH 614 Introduction to Disease Prevention and Health Promotion</td>
<td></td>
</tr>
</tbody>
</table>

*Beginning Fall 2013, the MPH and MSPH degree programs require EPH 500 Introduction to Public Health.

**Prior to Fall 2013, both EPH 501 and EPH 502 were required courses for the MPH and MSPH degree. Beginning Fall 2013, EPH 502 is only required for the MSPH degree. EPH 501 remains a requirement for both degrees. EPH 502 Medical Biostatistics II is not required for the MPH joint degree programs.
c. Assessment of the extent to which this criterion is met and an analysis of the program’s strengths, weaknesses and plans relating to this criterion.

This criterion is met.

A strength of the program is the addition of EPH 500 Introduction to Public Health as a requirement for the MPH and MSPH. This course sets a context for the more detailed core courses that follow and provides a comprehensive first exposure to the core areas of public health.

An additional strength is the diverse background and teaching experience of our faculty. The faculty instructing the core courses in public health bring a vast amount of community and academic experience to the classroom. Curriculum opportunities have expanded in conjunction with our growing student body and the Graduate Programs is continually revaluating the delivery of core competency knowledge based on student feedback.