2.12 DOCTORAL DEGREES
The school shall offer at least three doctoral degree programs that are relevant to three of the five areas of basic public health knowledge.

2.12.a Identification of all doctoral programs offered by the school.

The college offers three doctoral programs: DrPH in Community Health, DrPH in Epidemiology, and a PhD in Environmental Health Sciences. The DrPH program is designed as a post-MPH program and is most efficiently completed in three years. Students who are admitted with a degree other than the MPH must take the MPH core courses as a pre-or co-requisite prior to final admission into the program. The PhD program is designed such that a student entering without a master’s degree takes a minimum of five years and those with a master’s degree a minimum of four years. As of spring 2014, seven students have earned their DrPH Community Health, six have earned their DrPH Epidemiology, and two students have graduated from the PhD Environmental Health Sciences. Of the 15 graduates, three have gone into the Epidemic Intelligence Service, six have secured faculty positions, three have obtained post-doctoral fellowships, and one accepted a senior position in public health practice.

2.12.b Description of specific support and resources available to doctoral students including traineeships, mentorship opportunities, etc.

Doctoral program support is strong at the college. Full-time doctoral students are eligible to apply for a graduate assistantship (GA) through multiple sources: 1) college-funded assistantships, 2) grant-funded research assistantships, and 3) other university assistantships. Virtually all doctoral students in the college who apply for an assistantship are awarded one for up to three years. Doctoral GA’s are remunerated at a rate of $14,000/academic year plus a tuition waiver. At $14,000 plus $9,800 in graduate tuition divided by the 640 hours (2 semesters at 16 weeks each x 20 hours per week), the value of the GA is roughly $37 per hour. All GAs are funded as in-state positions. Books and fees are not covered. Also, if an out-of-state GA has satisfactory performance over the year prior to summer semester, they may take summer courses at an in-state rate.

College-funded assistantships make up the majority of funded positions for doctoral students. These include both Graduate Teaching Assistantships (GTA’s) and Graduate Research Assistantships (GRA’s). The GTA’s typically help with administration of courses and, in a more senior capacity, may have a supervised class of their own. College-supported GRA’s are usually aligned with new faculty as part of a research start-up package. They typically support new research initiatives, but occasionally will assist with course management as well. Placement for GTAs and GRAs is done by mutual consent and agreement with the DrPH program coordinator, the student and the academic dean.

Grant-funded assistantships are another form of support for doctoral students. These are typically thought of as mentored graduate research assistantships. From 2011-14, on average, there were four to five grant-funded doctoral students placed on at least four federal grants. The rate of pay for a grant-funded doctoral student typically does not differ in scale, though it has in the case of one senior doctoral student who obtained federal funding for her dissertation work. However, principal investigators of grants with funding lines for doctoral students typically write them in for 12 month rather than nine month positions, using a stipend of $18,000 plus a tuition. Two such assistantships, funded initially through LIFEPATH-PHTC resources, are the Academic Health Department coordinator positions.

The third source of funds for doctoral support include the various other assistantships on campus including: 1) the president’s Office on Equity & Diversity, which has funded a doctoral student in each of the last five years in an effort to promote diversity in the student body, 2) the School of Graduate
Studies typically supports a student every other year on average, and 3) other colleges and departments in the university that have faculty investigators with research funding. The latter case is one that has worked well for the college, particularly through a partnership with the Department of Geosciences. C. Gregg, Associate Professor of Geosciences, is a leading expert on tsunami preparedness. He has had multi-year NSF funding to increase the tsunami-preparedness capacity of low-lying coastal areas. C. Gregg’s research has supported three doctoral students in the college, and he has served as a research mentor for dissertation work in this area, partnering with the students’ departmental mentors and committees to craft a dissertation that meets the competencies of the program.

All doctoral funding mechanisms operate in support of the vision that doctoral students can choose one of three tracks for their career development: 1) a teaching-oriented academic track, wherein the student gets both research and teaching experience but is targeting a teaching-focused institution for a first position, such as the college’s graduates that have gone on to university teaching positions at ETSU, north Florida and others, 2) a research-oriented academic track, wherein the student is placed with a funded PI or a research active junior faculty who mentors the student in targeting a top-tier research post-doctoral fellowship or tenure-earning position at a research-intensive university, such as the college’s graduates that have gone on to tenure earning positions at ETSU or other schools and programs of public health, or postdoctoral fellowships at UNC-Chapel Hill or Vanderbilt, and 3) a practice track wherein the student is mentored by a combination of college and practice staff, such as the AHD coordinators, senior leadership at an Non-Governmental Organization (NGO), or the three EIS officer placements in the past six years.

Additional sources of support for doctoral students at ETSU include 1) Dissertation Boot Camp, offered by the School of Graduate Studies, a twice-yearly weekend writing workshop to help guide the development of doctoral dissertations, and 2) Dissertation grants amounting up to $1500 to help support data collection and project completion.

2.12.c Data on student progression through each of the school’s doctoral programs, to include the total number of students enrolled, number of students completing coursework and number of students in candidacy for each doctoral program. See CEPH Template 2.10.1.

As of the fall 2014 semester, there were 11 students progressing through the DrPH Community Health, 12 in the DrPH Epidemiology, and three (3) in the PhD in Environmental Health Sciences. Of the DrPH students, 16 were enrolled full-time in fall 2014, and seven (7) were part-time. The PhD students are all full-time. Table 2.12.c. summarizes doctoral student data for the 2014-15 academic year for all three degrees.

| Table 2.12.c Doctoral Student Progression Data for Academic Year 2014-15 |
|-------------------|------------------|------------------|------------------|
|                   | DrPH Epidemiology | DrPH Community Health | PhD Environmental Health Sciences |
| # newly admitted in 2014 | 4                | 3                 | 2                |
| # currently enrolled (total) in 2014-15 | 12               | 11                | 3                |
| # completed coursework during 2013-14 | 3                | 5                 | 0                |
| # advanced to candidacy (cumulative) 2013-14 | 2                | 5                 | 0                |
| # graduated in 2013-14 | 0                | 2                 | 0                |

The doctoral recruiting class for fall 2014 has been particularly strong. A total of 39 applicants completed their SOPHAS application for the DrPH and PhD programs. Of those, the college accepted nine (9) applicants, and all 9 acceptances enrolled in classes in fall 2014 (see Table 4.3.d for details).
### 2.12.d Identification of specific coursework, for each degree, that is aimed at doctoral-level education.

The doctoral degree programs have sufficient coursework at the doctoral level (6000-level) to distinguish the courses from other graduate programs in the area. The tables below document the 6XXX-level courses, and those are tagged with an asterisk.

#### Table 2.12.d.1 DrPH Core Curriculum by Knowledge Area – Doctoral-specific Coursework

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Core Doctoral Coursework Marked With *</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biostatistics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSTA 5350</td>
<td>Biostatistics II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Environmental Health Sciences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVH 5405</td>
<td>Environmental Concerns in Public Health</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Social and Behavioral Sciences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COBH 6110*</td>
<td>Social and Behavioral Determinants of Health and Disease</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Health Policy and Management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSMP 6130*</td>
<td>Public Health Leadership, Policy Development and Ethics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Epidemiology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPID 6100*</td>
<td>Epidemiology II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Cross Cutting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COBH 6150*</td>
<td>Evaluation Research in Public Health</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>COBH 6160*</td>
<td>Systems Approaches in Public Health Issues</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BSTA 6170*</td>
<td>Research Applications in Public Health</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>COBH 6195*</td>
<td>Seminar in Public Health</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

#### Table 2.12.d.2 DrPH - Epidemiology

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Epidemiology Doctoral Coursework Marked With *</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Epidemiology Required Courses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COBH 6210*</td>
<td>Health Assessment and Surveillance Research</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EPID 6410*</td>
<td>Advanced Multivariate Analysis</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EPID 6420*</td>
<td>Applied Epidemiologic Analysis</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EPID 6435*</td>
<td>Field Epidemiology</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Epidemiology Elective Courses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPID 6440*</td>
<td>Cardiovascular Epidemiology</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EPID 6450*</td>
<td>Cancer Epidemiology</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EPID 6460*</td>
<td>Reproductive and Perinatal Epidemiology</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Field Practicum</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPID 6850*</td>
<td>Doctor of Public Health Practicum</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Culminating Experience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPID 6960*</td>
<td>Doctor of Public Health Dissertation</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>
### Table 2.12.d.3 DrPH - Community Health

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COBH 6210*</td>
<td>Health Assessment and Surveillance Research</td>
<td>3</td>
</tr>
<tr>
<td>COBH 6220*</td>
<td>Methods in Community Health Research</td>
<td>3</td>
</tr>
<tr>
<td>COBH 6240*</td>
<td>Organizing in Communities for Health Action</td>
<td>3</td>
</tr>
<tr>
<td>COBH 6250*</td>
<td>Evidence-based Public Health: Best Practices in Community Health</td>
<td>3</td>
</tr>
</tbody>
</table>

**Field Practicum**
- COBH 6850* | Doctor of Public Health Practicum | 6            |

**Culminating Experience**
- COBH 6960* | Doctor of Public Health Dissertation | 9            |

### Table 2.12.d.4 PhD – Environmental Health Sciences

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Course Requirements</td>
<td>Environmental Health Doctoral Coursework Marked With *</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 5100/6100</td>
<td>Environmental Health Practice I</td>
<td>3</td>
</tr>
<tr>
<td>BSTA 5310</td>
<td>Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>EPID 5400</td>
<td>Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 6910*</td>
<td>Experimental Design</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 6920*</td>
<td>Doctoral Seminar (take three times -1 credit each)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**
- 5XXX-6XXX* | Directed elective courses will be determined by the Graduate Advisory Committee that is responsible for overseeing the student's overall academic program, including the program of study. | 41          |

**Culminating Experience**
- ENVH 6960* | Doctor of Public Health Dissertation | 16           |

2.12.e Assessment of the extent to which this criterion is met and an analysis of the school’s strengths, weaknesses and plans relating to this criterion.

This criterion is met.

**Strengths:**
1) The college has competency-based doctoral curricula designed to provide graduates with both practical and significant academic skills to permit them to join an academic institution as a faculty member or to join a public health agency as a senior member.
2) Resources for the doctoral programs, including graduate assistantships and faculty mentoring, are widely available and utilized.
3) In six years, the programs have produced 15 doctorates with outstanding job placement.

**Weaknesses:**
While the PhD Environmental Health Sciences has enrolled a small number of students, which is not uncommon given the relative newness of the program, two candidates have successfully graduated, both with outstanding outcomes, and one is continuing. Two new enrollees have joined the program in fall 2014.


**Plans:**

1) There is a comprehensive marketing plan for environmental health in process.

2) Continue monitoring the progress of the doctoral programs and incorporating feedback from recent graduates.

3) As a part of the continuous quality improvement efforts of the college, the 2014-19 Strategic Plan calls for reviewing and, as needed, revising the DrPH program competencies. Action items for achieving this objectives are detailed in the Strategic Plan document.