I. PROGRAM LEARNING OUTCOMES

The objectives of the Public Health degree center around programmatic learning goals and core skills that not only provide an in-depth science education but aid students in developing skills necessary for future careers. These include:

- Students will be able to differentiate and define of structures and objectives of public health, including the history and philosophy of public health, key achievements, and explain the organization of the U.S. public health system and across the globe.
- Students will demonstrate comprehension of a foundational science education including epidemiology, health and disease, social and behavioral sciences, biological and life sciences, anatomy and physiology, chemistry, statistics, and scientific writing.
- Students will demonstrate comprehension of community health, humanities, ethics, leadership, and effective health communication.
- Students will apply leadership, communication skills, and community and public health knowledge through experiential learning activities including internships, service-learning projects, capstone senior seminars, research papers, honors theses, or other scholarly, cumulative, and integrative applied experiences to support academic and career goals.
- Students will design an academic plan for graduation and identify, write, and describe a plan for professional success in their career path.
- Students will demonstrate effective oral and written communication skills and relate public health information to diverse audiences.
- Students will apply critical thinking through independent learning and collaborations with colleagues, peers, and community members and identify, evaluate, and synthesize public health information.

II. PROCEDURES USED FOR ASSESSMENT

A. Direct Assessment

To estimate the extent to which students met each of the seven Program Learning Outcomes (Table 1) for the Public Health program, we utilized grade distributions from BIO1080 and EES4720 which address a subset of these
B. Scoring of Student Work

To estimate the extent to which students met each of the seven Program Learning Outcomes (Table 1) for the Public Health program, we utilized grade distributions from BIO1080 and EES4720 which address a subset of these objectives. Summary of the seven Program Learning Outcomes desired for Public Health majors. Outcome Courses Addressing the Outcome 1 Students will be able to differentiate and define structures and objectives of public health, including the history and philosophy of public health, key achievements, and explain the organization of the U.S. public health system and across the globe. BIO1080 2 Students will demonstrate comprehension of a foundational science education including epidemiology, health and disease, social and behavioral sciences, biological and life sciences, anatomy and physiology, chemistry, statistics, and scientific writing. EES4720 3 Students will demonstrate comprehension of community health, humanities, ethics, leadership, and effective health communication. Not Addressed 4 Students will apply leadership, communication skills, and community and public health knowledge through experiential learning activities including internships, service-learning projects, capstone senior seminars, research papers, honors theses, or other scholarly, cumulative, and integrative applied experiences to support academic and career goals. BIO1080, EES4720 5 Students will design an academic plan for graduation and identify, write, and describe a plan for professional success in their career path. Not Addressed 6 Students will demonstrate effective oral and written communication skills and relate public health information to diverse audiences. BIO1080, EES4720 7 Students will apply critical thinking through independent learning and collaborations with colleagues, peers, and community members and identify, evaluate, and synthesize public health information. BIO1080, EES4720 The grade distributions in each course were used to calculate a pass rate defined as the percentage of students earning grades “A”, “B”, “C”, “D”, or “P” in each course. An aggregate percent achievement rate for each Program Learning Outcome was then calculated as the average pass rate of each course which contained the target Program Learning Outcome weighted by the enrollment in that course.

C. Indirect Assessment

This will be done with the development of a Qualtrics survey to graduating students going forward.

III. ASSESSMENT RESULTS/INFORMATION:
Summary of the seven Program Learning Outcomes desired for Public Health majors.

Summary of the five Program Learning Outcomes desired for Public Health majors which are addressed in Biological Sciences coursework. Outcome Percent
Achievement 1 Students will be able to differentiate and define of structures and objectives of public health, including the history and philosophy of public health, key achievements, and explain the organization of the U.S. public health system and across the globe. 93.8
2 Students will demonstrate comprehension of a foundational science education including epidemiology, health and disease, social and behavioral sciences, biological and life sciences, anatomy and physiology, chemistry, statistics, and scientific writing. 96.0
4 Students will apply leadership, communication skills, and community and public health knowledge through experiential learning activities including internships, service-learning projects, capstone senior seminars, research papers, honors theses, or other scholarly, cumulative, and integrative applied experiences to support academic and career goals. 94.7
6 Students will demonstrate effective oral and written communication skills and relate public health information to diverse audiences. 94.7
7 Students will apply critical thinking through independent learning and collaborations with colleagues, peers, and community members and identify, evaluate, and synthesize public health information. 94.7

[Analysis]

IV. ACTIONS TO IMPROVE STUDENT LEARNING

Program learning outcome data will be shared with program faculty and staff at the department meetings. It will be shared with other stakeholders including faculty and staff in other departments and department sponsors upon request by these parties. The aggregate achievement measures are well over 90% for the five learning outcomes addressed. Although the representation of Biological Sciences coursework representing the public health objectives is sparse, we would welcome the aggregation of this analysis with those of the public health outcomes from other departments to get a more holistic look at how well students are meeting these outcomes. Although we could continue to use course grade distributions to get at achievement of these outcomes, another option is doing an indirect assessment of our public health graduates using an exit survey which asks the extent to which they feel an outcome has been met and/or relative comfort pursuing work after graduation that aligns with a specific outcome. We acknowledge that reported achievement does not necessarily align with actual achievement. However, this approach could be more useful from a marketing perspective since responses would align better with how graduates are likely to communicate with others about the quality of the Biological Sciences program for preparing public health professionals, and their satisfaction with the program.

V. SUPPORTING DOCUMENTS
Additional documentation, when provided, is stored in the internal Academic Program Assessment of Student Learning SharePoint site.