

Epidemiology - MPH

2017 - 2018 Assessment Plan

Currently status is: Report Accepted

I. ANNUAL REPORT FOR 2016 - 2017

Mission Statement

The specific mission of the MPH in Epidemiology is to prepare students with a medical background to apply epidemiologic skills in a practice setting.

Goal 1.

Graduates of this program will be exposed to and demonstrate an understanding of a variety of public health areas including health promotion and education, environmental health sciences, health administration, epidemiology and biostatistics.

Curriculum

The primary courses that address the first part of this goal are the three required SPH core courses: ENHS 660, Concepts of Environmental Health Sciences; HSPM 700, Approaches and Concepts of Health Administration; and HPEB 700, Public Health Education Concepts. The more department-specific competencies are obtained in two general areas: students are exposed to fundamental biostatistics concepts in BIOS 701 and BIOS 757, and to epidemiological concepts in EPID 701, EPID 741, and EPID 798. Secondary courses specific to the discipline include BIOS 745 and EPID 730.

Learning Outcome 1.

Students will demonstrate an understanding of a) fundamental principles and practices in health promotion, education, and behavior; b) organization, principles, and practices in health administration; c) principles and practices in epidemiology, and tools for translating epidemiological findings into public health action; d) public health statistical applications; e) environmental health from the perspective of the earth as a complex, dynamic system.

Measures and Criteria

1a. The culminating assignment for HPEB 700 is a paper involving critical evaluation of a health education/promotion program. The assignment requires students to apply methods and skills to evaluate the evidence base that exists for addressing public health problems. A grading rubric is used in grading this assignment. The average score for this assignment should be at least 80 (i.e., B).

1b. The integrative assignment covering health administration organization, principles, and practices for HSPM 700 is a set of four cases requiring students to demonstrate proficiency in assessing a public health management problem, reviewing current evidence-based practice, and proposing a solution. These cases require theoretical and practical knowledge in such areas as financial management, quality improvement, marketing, leadership, motivation, and management. A grading rubric for each exercise is used in assessing student performance. The average score for these case assignments should be at least 80%.

1c. The final assignment for EPID 701 will include a critique of an epidemiological study. The MPH student will analyze the appropriateness of the study design, identify the strengths and weaknesses of the study and will provide and justify recommendations to improve it. The average score for this assignment should be at least 80%.

1d. The three exams for BIOS 701 will include questions to be used for assessment purposes. One set of questions will address the fundamental concepts of identifying null and alternative hypotheses, and determining the most appropriate statistical test. The second set of questions will require calculating a test statistic and/or identifying this from computer printout, and interpreting the results of the analysis in the context of the problem. The average score for these questions across all three exams should be at least 80%.

1e. The final exam for ENHS 660 will include a series of questions that address the fundamental concepts of Environmental Health Sciences. The average score for these questions should be at least 80%.

EPID 701 grading rubric

Methods

For any given course, assessment can be done once every two years as long as at least two core courses are evaluated each year, as coordinated by the school Office of Academic Affairs (OAA). Each spring the Director of Evaluation and Academic Assessment in the OAA will collect data from the program directors for the courses being assessed. Because this learning outcome is assessed across MPH programs, data from all students in the courses will be used (see attached rationale).

Annual results are primarily shared with faculty in the department offering the course for potential revisions. However, other departments offering the MPH degree will also assess how each core course works within the curriculum and may either adjust the course sequencing with the curriculum or request the department offering the course to consider revisions to the course based on how the disciplinary-specific content is integrated across courses. At the school level, results are reviewed across the seven MPH programs and any suggested changes must be reviewed and approved by the Academic Programs Committee and the Senior Associate Dean for Academic Affairs. At minimum, the public health core is reviewed comprehensively (across five courses/seven programs) every seven years as part of the school accreditation process. Aggregate data is essential for this assessment.

MPH rationale (2016)

Results

1a. HPEB 700: Two sections of this course were taught in the 2016-2017 academic year, both for the on-campus MPH programs. In Summer 2016, one section of the course was taught in a distance format. In that section, 30 students completed the course, with an average grade of 94% on the culminating assignment, meeting the minimum criterion ($\geq 80\%$). Another section of the course was taught in Fall 2016. In that section, 26 students completed the course, also with an average grade of 94% on the culminating assignment, meeting the minimum criterion. In total, 56 students completed the course, with an average grade of 94% on the culminating assignment, meeting the minimum criteria.

1b. HSPM 700: The course was taught Fall 2016. In this semester, the 43 students completed the four case study assignments. As noted in the table, the average score for each case study assignment exceeded 80%. This criterion was met.

Case Study	Average Grade
#1	95.8%
#2	94.2%
#3	89.5%
#4	99.2%

1c. EPID 700: Zero MPH students enrolled in EPID 701 this academic year.

1d. Zero MPH students enrolled in BIOS 701 this academic year.

1e. ENHS

Among graduate students taking ENHS 660 in the past three semesters, the average scores on the relevant questions is shown below. All were above 80%, meeting the criterion.

Summer 2016 = 92.1%

Fall 2016 = 93.3%

Spring 2017 = 98.6%

All criteria were met

Use of Results

We have had only 2 MPH students enrolled in EPID 701 over the last three years (both students were enrolled in 2014-2015). We began evaluating the study critique in EPID 701 beginning three years ago. Given the very low enrollment coupled with both students being evaluated in the same year, we do not believe using aggregated data for this learning outcome provides meaningful information. We plan no changes to the curriculum based on this result.

Goal 2.

MPH program graduates will understand concepts of epidemiology relating to study design, implementation and evaluation of investigation.

Curriculum

Students will be primarily exposed to these topics in the following Epidemiology core courses: EPID 701 (Concepts and Methods of Epidemiology) and EPID 741 (Epidemiologic Methods) and secondarily in EPID 758 (Application of Epidemiology in Public Health), EPID 730 (Public Health Surveillance Systems) and BIOS 757 (Intermediate Biometrics).

Learning Outcome 1.

Students will differentiate between common epidemiologic study designs.

Measures and Criteria

All master's students are required to take a comprehensive exam during their second year in the program. The exam is offered at the beginning of the spring semester. Since we have very few MPH students, we will evaluate the questions from the last three Comprehensive Examinations which specifically address this learning outcome. At least 75% of students will average higher than 75% on the chosen questions.

Methods

The examination committee will grade each student's exam and determine the score for each question as well as an average score. Student level as well as program level data will be collected. The examination committee chairperson is responsible for aggregating all the information and putting it into a report for the faculty. Depending on the results, the faculty may deem that curriculum changes need to be made. MPH student data will be collected separately from MSPH student data for learning outcome purposes only. The compiled results will be discussed in the EPID division faculty meeting at the beginning of the next academic year and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a year; department faculty meetings are monthly.

Results

Given the very small enrollment in our MPH degree program, we chose to aggregate data from 2012-2013 through 2016-2017 (5 years) rather than three years in order to assess this learning outcome. Five MPH students took the comprehensive exam during this time period. In order to meet this learning outcome, 4 students need to average >75% on the questions specific to this learning outcome. Four of the five students (80%) averaged 75% on these questions; therefore, we successfully meet this learning outcome.

Use of Results

We plan no changes to the curriculum based on this result.

Learning Outcome 2.

Students will demonstrate the ability to calculate and interpret measures of association.

Measures and Criteria

Data from the the last three academic years will be used to assess each student. Questions from the EPID 741 final exam that pertain specifically to calculating and interpreting measures of association will be used to evaluate this learning outcome. At least 75%% of students will average higher than 75% on these questions.

Methods

The faculty member who teaches EPID 741 will grade each examination and determine the score for each question as well as an average score. Student level as well as program level data are collected. MPH student data will be separated from MSPH student data and tabulated separately. The compiled results will

be discussed in the EPID division faculty meeting and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a year; department faculty meetings are monthly.

Results

Two MPH students enrolled in EPID 741 this academic year. Both students (100%) averaged >75% on questions related to calculating and interpreting measures of association; therefore, this learning outcome is met.

Use of Results

We plan no changes to the curriculum based on this result.

Goal 3.

MPH program graduates will gain a broad understanding of diversity and culture, ethical principles, program planning and systems thinking.

Curriculum

MPH students will be exposed to concepts necessary to be proficient in these skills primarily in EPID 758 (Application of Epidemiology in Public Health) and EPID 741 (Epidemiologic Methods I) and reinforced in EPID 745 (Seminar in Epidemiology).

Learning Outcome 1.

Students will understand basic ethical principles pertaining to public health research and practice.

Measures and Criteria

Data from the last three academic years pertaining to ethical principles will be used to assess this learning outcome. Specifically, questions from the EPID 758 final exam will be examined. At least 75% of students will average > 75% on the questions which pertain to this learning outcome.

Methods

The faculty member who teaches EPID 758 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data are collected. MPH student data will be separated from MSPH student data for the purposes of evaluating learning outcomes. The compiled results will be discussed in the EPID division faculty meeting and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a year; department faculty meetings are monthly.

Results

Our three year enrollment in EPID 758 has been: 2014-15 (0), 2015-16 (1), and 2016-17 (1). Both students averaged >75% on questions pertaining to this learning outcome. Therefore, we met this learning outcome.

Use of Results

We plan no changes to the curriculum based on this result.

Learning Outcome 2.

Students will describe the roles of history, power, privilege and structural inequality in producing health disparities.

Measures and Criteria

Data from the last three academic years will be used to assess each student. Questions from the EPID 758 final exam which pertain to health disparities will be used. At least 75% of students will average > 75% on the questions which pertain to this learning outcome.

Methods

The faculty member who teaches EPID 758 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data are collected. MPH student data will be separated from MSPH student data for the purposes of evaluating learning outcomes. The compiled results will be discussed in the EPID division faculty meeting and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a year; department faculty meetings are monthly.

Results

Our three year enrollment in EPID 758 has been: 2014-15 (0), 2015-16 (1), and 2016-17 (1). One (50%) student averaged >75 % on questions pertaining to this learning outcome. Therefore, we did not meet this learning outcome.

Use of Results

We did not meet this learning outcome last academic year; however, we did see an improvement as our student scored >75% this academic year. While we plan no changes to the curriculum based on this result, we will closely monitor this learning outcome in our next academic assessment plan.

Learning Outcome 3.

Students will explain how the findings of a program evaluation can be used.

Measures and Criteria

Data from the last three academic years pertaining to program evaluation will be used to assess each student. Specifically, questions from the EPID 758 final exam will be examined. At least 75% of students will average > 75% on the questions which pertain to this learning outcome.

Methods

The faculty member who teaches EPID 758 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data are collected. MPH student data will be separated from MSPH student data for the purposes of evaluating learning outcomes. The compiled results will be discussed in the EPID division faculty meeting and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a year; department faculty meetings are monthly.

Results

Our three year enrollment in EPID 758 has been: 2014-15 (0), 2015-16 (1), and 2016-17 (1). Both students averaged >75% on questions pertaining to this learning outcome. Therefore, we met this learning outcome.

Use of Results

We plan no changes to the curriculum based on this result.

Learning Outcome 4.

Students will explain how individuals, social networks, organizations and communities may be viewed as systems in the analysis of public health problems.

Measures and Criteria

Data from the last three academic years pertaining to systems thinking will be used to assess each student. Specifically, questions from the EPID 758 final exam will be examined. At least 75% of students will average > 75% on the questions which pertain to this learning outcome.

Methods

The faculty member who teaches EPID 758 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data are collected. MPH student data will be separated from MSPH student data for the purposes of evaluating learning outcomes. The compiled results will be discussed in the EPID division faculty meeting and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a year; department faculty meetings are monthly.

Results

Our three year enrollment in EPID 758 has been: 2014-15 (0), 2015-16 (1), and 2016-17 (1). Both students averaged >75% on questions pertaining to this learning outcome. Therefore, we met this learning outcome.

Use of Results

We plan no changes to the curriculum based on this result.

Goal 4.

MPH program graduates will have adequate knowledge in biostatistical procedures as well as be competent in information technologies and data management required to be successful in public health practice settings.

Curriculum

MPH program students will be exposed to topics necessary to be proficient in these skills primarily in BIOS 701 (Introduction to Biostatistics), BIOS 710 (Data Management), and BIOS 757 (Intermediate Biometrics) and reinforced in EPID 741 (Epidemiologic Methods I).

Learning Outcome 1.

Students will create and manipulate datasets and analyze data using appropriate statistical methods and software packages.

Measures and Criteria

Data from the last three academic years will be used to assess each student for this learning outcome.

Specifically, questions from the BIOS 710 final examination which pertain to creating and manipulating datasets as well as analyzing data will be evaluated for this particular learning outcome. At least 75% of students will average >75% on these questions.

Methods

The faculty member who teaches BIOS 710 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data will be collected. MPH student data will be separated from MSPH student data and tabulated separately. The compiled results will be discussed in the EPID division faculty meeting. If curriculum changes are deemed necessary, these suggested changes will be discussed with the BIOS division faculty. Division meetings are held twice a year.

Results

Two MPH students enrolled in BIOS 710 this academic year. Both students averaged at least 75% on the questions pertaining to this learning outcome; therefore, this learning outcome was met.

Use of Results

We plan no changes to the curriculum based on this result.

Learning Outcome 2.

Students will demonstrate proficiency in creating tables and reports using appropriate software packages.

Measures and Criteria

Data from the current academic year will be used to assess each student for this learning outcome.

Specifically, questions from the BIOS 710 final examination which pertain to creating tables and reports will be evaluated for this particular learning outcome. At least 75% of students will average >75% on these questions.

Methods

The faculty member who teaches BIOS 710 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data will be collected. MPH student data will be separated from MSPH student data and tabulated separately. The compiled results will be discussed in the EPID division faculty meeting. If curriculum changes are deemed necessary, these suggested changes will be discussed with the BIOS division faculty. Division meetings are held twice a year.

Results

Two MPH students enrolled in BIOS 710 this academic year. Both students averaged at least 75% on the questions pertaining to this learning outcome; therefore, this learning outcome was met.

Use of Results

We plan no changes to the curriculum based on this result.

Learning Outcome 3.

Students will correctly interpret results from statistical analyses.

Measures and Criteria

All master's students are required to take a comprehensive exam during their second year in the program. The exam is offered at the beginning of the spring semester. Since we have very few MPH students, we will evaluate questions from the last three Comprehensive Examinations. 90% of students will average higher than 75% on the chosen questions.

Methods

The examination committee will grade each student's exam and determine the score for each question as

well as an average score. Student level as well as program level data will be collected. The examination committee chairperson is responsible for aggregating all the information and putting it into a report for the faculty. MPH student data will be collected separately from MSPH student data for learning outcome purposes only. If weaknesses are noted, the division faculty will discuss strategies specifically targeting those weaknesses which, if agreed upon by the faculty, will be implemented and assessed during the next academic year. Division meetings are held twice a year; departmental faculty meetings are monthly.



Results

Given the very small enrollment in our MPH degree program, we chose to aggregate data from 2012-2013 through 2016-2017 (5 years) rather than three years in order to assess this learning outcome. Five MPH students took the comprehensive exam during this time period. In order to meet this learning outcome, all 5 students need to average >75% on the questions specific to this learning outcome. Four of the five students (80%) averaged 75% on these questions; therefore, we did not meet this learning outcome

Use of Results

We have very few students in the MPH EPID degree program, averaging one student/year. Upon reflection, we intend to change the criterion for meeting this LO such that >75% of students (instead of 90% students) will need to average over 75% on the questions assessing this LO. We believe that this is much more reasonable given our small enrollment. We made this change for several other learning outcomes in last year's AAP. We do not plan any curriculum changes at this time; however, we will continue to monitor aggregated data.

Goal 5.

MPH program graduates will demonstrate integration of the MPH core competencies and an understanding of public health practice.

Curriculum

MPH program students will be exposed to the topics necessary to develop these skills in primarily in EPID 798 (Public Health Practice) and reinforced in EPID 758 (Application of Epidemiology in Public Health).

Learning Outcome 1.

Students will demonstrate practical skills in a public health setting.

Measures and Criteria

All MPH students are required to complete a minimum 250-hour practicum project in a public health practice setting for their culminating experience. This practicum requires integration and application of broad public health knowledge, epidemiologic and biostatistical skills and other attributes to a defined public health problem. In order to evaluate this learning outcome, two measures will be used. In order to meet this learning outcome, both criteria must be met.

1. All students completing a practicum during the current academic year must submit a written report and do an oral presentation for the faculty advisor and agency preceptor at minimum; the final version of the written report must be approved by the faculty advisor and preceptor. The report and presentation are assessed by the faculty advisor in consultation with the preceptor and given an overall pass or fail grade. In order to meet this learning outcome, all students completing a practicum will receive a passing score on both their written report and oral presentation.
2. The study, faculty advisor and preceptor are required to complete an evaluation at the end of the student's practicum experience. On the student evaluation of the practicum, student will indicate personal achievement of the practicum objectives; on the preceptor evaluation of the practicum, the preceptor will indicate whether the student has accomplished the practicum objectives; and on the faculty evaluation of the practicum, the faculty advisor will indicate whether the student has accomplished the practicum objectives. In order to meet this learning objective, all MPH students will average at least 3.0 on a scale of 1-4 on the evaluation forms completed by faculty advisors and preceptors.

Methods

At the end of the spring semester, the Graduate Director will accumulate the last three years of data

(summer, fall, and spring) regarding pass/fail for the written report and oral presentation for all MPH students and will calculate average scores from the student evaluations. The average scores for these items, along with student comments related to the practicum, will be discussed with the epidemiology division faculty. If weaknesses are noted, the division faculty will discuss strategies specifically targeting those weaknesses which, if agreed upon by the faculty, will be implemented and assessed during the next academic year. Division meetings are held twice a year; departmental faculty meeting are held monthly.

Results

Two MPH students completed a written report and oral presentation of their practicum during the last three years. Both students received a passing grade on their written report and oral presentation, and received a good rating or higher from his/her faculty advisor and site preceptor (only one student was evaluated by preceptor). Therefore, this learning outcome was met.

Use of Results

We believe the methods/criteria for this learning outcome need to be revised in order to be clearer; therefore, we have made this change for the next academic year. We plan no changes to the curriculum based on this result.

Learning Outcome 2.

Students will demonstrate proficiency in public health practice by successfully completing at least two of the following competencies during their practicum: 1. Designing a public health program; 2. Monitoring and evaluating a public health program; 3. Writing progress report for funding agency or reporting authority; 4. Participating in data analysis related to public health program; 5. Participating in applying for funding for public health program; or 6. Participating in public health related service delivery.

Measures and Criteria

All MPH students are required to complete a minimum 250-hour practicum project in a public health practice setting for their culminating experience. This practicum requires integration and application of broad public health knowledge, epidemiologic and biostatistical skills and other attributes to a defined public health problem. In order to evaluate this learning outcome, the student's practicum agreement must include at least two of the above competencies as learning objectives. All student practicum agreements will contain at least two of the above six competencies as learning outcomes.

Methods

At the end of the spring semester, the Graduate Director will examine all practicum agreements from the last three years to determine whether all agreements include at least two of the six competencies listed above as learning outcomes. All learning outcomes across the practicum agreement will be collected. These data will be aggregated and discussed with the epidemiology division faculty. If weaknesses are noted, the division faculty will discuss strategies specifically targeting those weaknesses which, if agreed upon by the faculty, will be implemented and assessed during the next academic year. Division meetings are held twice a year; departmental faculty meeting are held monthly.

Results

Zero MPH students complete a practicum during this academic year. We implemented the use of six competencies during the 2016-2017 academic year; therefore, we will not be able to provide aggregated data for a few years.

Use of Results

We plan no changes to the curriculum based on this result.

II. FUTURE ASSESSMENT PLAN FOR 2017 - 2018

Mission Statement

The specific mission of the MPH in Epidemiology is to prepare students with a medical background to apply epidemiologic skills in a practice setting.

Goal 1.

Graduates of this program will be exposed to and demonstrate an understanding of a variety of public health areas including health promotion and education, environmental health sciences, health administration, epidemiology and biostatistics.

Curriculum Map

Curriculum

The primary courses that address the first part of this goal are the three required SPH core courses: ENHS 660, Concepts of Environmental Health Sciences; HSPM 700, Approaches and Concepts of Health Administration; and HPEB 700, Public Health Education Concepts. The more department-specific competencies are obtained in two general areas: students are exposed to fundamental biostatistics concepts in BIOS 701 and BIOS 757, and to epidemiological concepts in EPID 701, EPID 741, and EPID 798. Secondary courses specific to the discipline include BIOS 745 and EPID 730.

Learning Outcome 1.

Students will demonstrate an understanding of a) fundamental principles and practices in health promotion, education, and behavior; b) organization, principles, and practices in health administration; c) principles and practices in epidemiology, and tools for translating epidemiological findings into public health action; d) public health statistical applications; e) environmental health from the perspective of the earth as a complex, dynamic system.

MPH rationale - goal 1, LO1

Measures and Criteria

1a. The culminating assignment for HPEB 700 is a paper involving critical evaluation of a health education/promotion program. The assignment requires students to apply methods and skills to evaluate the evidence base that exists for addressing public health problems. A grading rubric is used in grading this assignment. The average score for this assignment should be at least 80 (i.e., B).

1b. The integrative assignment covering health administration organization, principles, and practices for HSPM 700 is a set of four cases requiring students to demonstrate proficiency in assessing a public health management problem, reviewing current evidence-based practice, and proposing a solution. These cases require theoretical and practical knowledge in such areas as financial management, quality improvement, marketing, leadership, motivation, and management. A grading rubric for each exercise is used in assessing student performance. The average score for these case assignments should be at least 80%.

1c. The final assignment for EPID 701 will include a critique of an epidemiological study. The MPH student will analyze the appropriateness of the study design, identify the strengths and weaknesses of the study and will provide and justify recommendations to improve it. The average score for this assignment should be at least 80%.

1d. The three exams for BIOS 701 will include questions to be used for assessment purposes. One set of questions will address the fundamental concepts of identifying null and alternative hypotheses, and determining the most appropriate statistical test. The second set of questions will require calculating a test statistic and/or identifying this from computer printout, and interpreting the results of the analysis in the context of the problem. The average score for these questions across all three exams should be at least 80%.

1e. The final exam for ENHS 660 will include a series of questions that address the fundamental concepts of Environmental Health Sciences. The average score for these questions should be at least 80%.

Methods

This is an overarching learning outcome for all MPH programs offered by the Arnold School and is assessed at the school level, rather than at the program level (see attached rationale).

Each spring, the school's Director of Evaluation and Academic Assessment requests results from the program directors for each of the above courses. Because this learning outcome is assessed across MPH programs, data from all students in the courses are used.

Annual results are primarily reviewed by faculty in the department offering the course for potential revisions. Each department has at least one internal curriculum committee. However, other departments offering the MPH degree will also assess how each core course works within the curriculum and may either adjust the course sequencing with the curriculum or request the department offering the course to consider revisions

to the course based on how the discipline-specific content is integrated across courses.

At the school level, results are reviewed across the seven MPH programs and any suggested changes must be reviewed and approved by the Academic Programs Committee and the Associate Dean of Faculty Affairs and Curriculum. Aggregate data is essential for this assessment.

Goal 2.

MPH program graduates will understand concepts of epidemiology relating to study design, implementation and evaluation of investigation.

Curriculum

Students will be primarily exposed to these topics in the following Epidemiology core courses: EPID 701 (Concepts and Methods of Epidemiology) and EPID 741 (Epidemiologic Methods) and secondarily in EPID 758 (Application of Epidemiology in Public Health), EPID 730 (Public Health Surveillance Systems) and BIOS 757 (Intermediate Biometrics).

Learning Outcome 1.

Students will differentiate between common epidemiologic study designs.

Measures and Criteria

All master's students are required to take a comprehensive exam during their second year in the program. The exam is offered at the beginning of the spring semester. Since we have very few MPH students, we will evaluate the questions from the last three to five years that specifically address this learning outcome. At least 75% of students will average higher than 75% on the chosen questions.

Methods

Every question on each student's exam is graded by two faculty, who provide their scores to the exam committee. The examination committee aggregates scores across all questions and calculates the final score for each student. Student level as well as program level data will be collected. The examination committee chairperson is responsible for aggregating all the information and providing a summary report for the faculty. Depending on the results, the faculty may deem that curriculum changes need to be made. MPH student data will be collected separately from MSPH student data for learning outcome purposes only. The compiled results will be discussed in the EPID division faculty meeting at the beginning of the next academic year and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a semester; department faculty meetings are monthly.

Learning Outcome 2.

Students will demonstrate the ability to calculate and interpret measures of association.

Measures and Criteria

Data from the last three to five academic years will be used to assess each student. Questions from EPID 741 exams that pertain specifically to calculating and interpreting measures of association will be used to evaluate this learning outcome. At least 75% of students will average greater than 75% on these questions.

Methods

The faculty member who teaches EPID 741 will grade each examination and determine the score for each question as well as an average score. Student level as well as program level data are collected. MPH student data will be separated from MSPH student data and tabulated separately. The compiled results will be discussed in the EPID division faculty meeting at the beginning of the next academic year and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a semester; department faculty meetings are monthly.

Goal 3.

MPH program graduates will gain a broad understanding of diversity and culture, ethical principles, program planning and systems thinking.

Curriculum

MPH students will be exposed to concepts necessary to be proficient in these skills primarily in EPID 758

(Application of Epidemiology in Public Health) and secondarily in EPID 741 (Epidemiologic Methods I) and EPID 745 (Seminar in Epidemiology).

Learning Outcome 1.

Students will understand basic ethical principles pertaining to public health research and practice.

Measures and Criteria

Data from the last three to five academic years pertaining to ethical principles will be used to assess this learning outcome. Specifically, questions from the EPID 758 final exam will be examined. At least 75% of students will average > 75% on the questions which pertain to this learning outcome.

Methods

The faculty member who teaches EPID 758 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data are collected. MPH student data will be separated from MSPH student data for the purposes of evaluating learning outcomes. The compiled results will be discussed in the EPID division faculty meeting at the beginning of the next academic year and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a semester; department faculty meetings are monthly.

Learning Outcome 2.

Students will describe the roles of history, power, privilege and structural inequality in producing health disparities.

Measures and Criteria

Data from the last three to five academic years will be used to assess each student. Questions from the EPID 758 final exam which pertain to health disparities will be used. At least 75% of students will average > 75% on the questions which pertain to this learning outcome.

Methods

The faculty member who teaches EPID 758 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data are collected. MPH student data will be separated from MSPH student data for the purposes of evaluating learning outcomes. The compiled results will be discussed in the EPID division faculty meeting at the beginning of the next academic year and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a semester; department faculty meetings are monthly.

Learning Outcome 3.

Students will explain how the findings of a program evaluation can be used.

Measures and Criteria

Data from the last three to five academic years pertaining to program evaluation will be used to assess each student. Specifically, questions from the EPID 758 final exam will be examined. At least 75% of students will average > 75% on the questions which pertain to this learning outcome.

Methods

The faculty member who teaches EPID 758 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data are collected. MPH student data will be separated from MSPH student data for the purposes of evaluating learning outcomes. The compiled results will be discussed in the EPID division faculty meeting at the beginning of the next academic year and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a semester; department faculty meetings are monthly.

Learning Outcome 4.

Students will explain how individuals, social networks, organizations and communities may be viewed as systems in the analysis of public health problems.

Measures and Criteria

Data from the last three to five academic years pertaining to systems thinking will be used to assess each student. Specifically, questions from the EPID 758 final exam will be examined. At least 75% of students

will average > 75% on the questions which pertain to this learning outcome.

Methods

The faculty member who teaches EPID 758 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data are collected. MPH student data will be separated from MSPH student data for the purposes of evaluating learning outcomes. The compiled results will be discussed in the EPID division faculty meeting at the beginning of the next academic year and curriculum changes, if needed, will be recommended for discussion with the full faculty. Division meetings are held twice a semester; department faculty meetings are monthly.

Goal 4.

MPH program graduates will have adequate knowledge in biostatistical procedures as well as be competent in information technologies and data management required to be successful in public health practice settings.

Curriculum

MPH program students will be exposed to topics necessary to be proficient in these skills primarily in BIOS 701 (Introduction to Biostatistics), BIOS 710 (Data Management), and BIOS 757 (Intermediate Biometrics) and reinforced in EPID 741 (Epidemiologic Methods I).

Learning Outcome 1.

Students will create and manipulate datasets and analyze data using appropriate statistical methods and software packages.

Measures and Criteria

Data from the last three to five academic years will be used to assess each student for this learning outcome. Specifically, questions from the BIOS 710 final examination which pertain to creating and manipulating datasets as well as analyzing data will be evaluated for this particular learning outcome. At least 75% of students will average >75% on these questions.

Methods

The faculty member who teaches BIOS 710 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data will be collected. MPH student data will be separated from MSPH student data and tabulated separately. The compiled results will be discussed in the EPID division faculty meeting at the beginning of the next academic year, and curriculum changes, if needed, will be discussed with the BIOS division faculty. Division meetings are held twice a semester.

Learning Outcome 2.

Students will demonstrate proficiency in creating tables and reports using appropriate software packages.

Measures and Criteria

Data from the current academic year will be used to assess each student for this learning outcome. Specifically, questions from the BIOS 710 final examination which pertain to creating tables and reports will be evaluated for this particular learning outcome. At least 75% of students will average >75% on these questions.

Methods

The faculty member who teaches BIOS 710 will grade each examination and determine the score for each question as well as an average score for each student. Student level as well as program level data will be collected. MPH student data will be separated from MSPH student data and tabulated separately. The compiled results will be discussed in the EPID division faculty meeting at the beginning of the next academic year, and curriculum changes, if needed, will be discussed with the BIOS division faculty. Division meetings are held twice a semester.

Learning Outcome 3.

Students will correctly interpret results from statistical analyses.

Measures and Criteria

All master's students are required to take a comprehensive exam during their second year in the program. The exam is offered at the beginning of the spring semester. Since we have very few MPH students, we will

evaluate questions from the last three to five comprehensive examinations. At least 75% of students will average > 75% on the chosen questions.

Methods

The examination committee will grade each student's exam and determine the score for each question as well as an average score. Student level as well as program level data will be collected. The examination committee chairperson is responsible for aggregating all the information and putting it into a report for the division faculty at the beginning of the next academic year. MPH student data will be collected separately from MSPH student data for learning outcome purposes only. If weaknesses are noted, the division faculty will discuss strategies specifically targeting those weaknesses which, if agreed upon by the full faculty, will be implemented and assessed during the next academic year. Division meetings are held twice a semester; departmental faculty meetings are monthly.

Goal 5.

MPH program graduates will demonstrate integration of the MPH core competencies and an understanding of public health practice.

Curriculum

MPH program students will be exposed to the topics necessary to develop these skills in EPID 798 (Public Health Practice) and reinforced in EPID 758 (Application of Epidemiology in Public Health).

Learning Outcome 1.

Students will demonstrate practical skills in a public health setting.

Measures and Criteria

All students completing a practicum during the current academic year must submit a written report and do an oral presentation. The report and presentation are assessed by the faculty advisor in consultation with the preceptor and given an overall pass or fail grade. In order to meet this learning outcome, all students completing a practicum will receive a passing score on both their written report and oral presentation. Given the small enrollment, data will be aggregated across the last three to five years.

Methods

At the end of the spring semester, the Graduate Director will collect the data regarding pass/fail for the written report and oral presentation for all MPH practica. These data will be discussed with the epidemiology division faculty at the beginning of the next academic year. If weaknesses are noted, the division faculty will discuss strategies specifically targeting those weaknesses which, if agreed upon by the faculty, will be implemented and assessed during the next academic year. Division meetings are held twice a semester; department faculty meeting are held monthly.

Learning Outcome 2.

Students will demonstrate proficiency in public health practice by successfully completing at least two of the following competencies during their practicum: 1. Designing a public health program; 2. Monitoring and evaluating a public health program; 3. Writing progress report for funding agency or reporting authority; 4. Participating in data analysis related to public health program; 5. Participating in applying for funding for public health program; or 6. Participating in public health related service delivery.

Measures and Criteria

The practicum agreement for all students completing their practica during the last two to three academic years will be evaluated for the inclusion of at least two of the above competencies as learning outcomes. In order to meet this learning outcome, all student practicum agreements will contain at least two of the above six competencies as learning outcomes.

Methods

At the end of the spring semester, the Graduate Director will examine all practicum agreements from the two previous academic years to determine whether all the agreements include at least two of the six competencies listed above as learning outcomes. These data will be aggregated and discussed with the epidemiology division faculty meeting at the beginning of the next academic year. If competencies are not being included, faculty and MPH students will be reminded of this requirement. Division meetings are held twice a semester; department faculty meeting are held monthly.

