Saint Louis University
Program Assessment Annual Reporting

It is recommended program assessment results be used to *celebrate achievements of student learning* as well as to *identify potential areas for future curriculum improvement*.

Please email this completed form as an attachment to ***thatcherk@slu.edu***

1. **Degree Program(s) included in this report:** BS, Emergency Management
2. **Department:** College for Public Health & Social Justice
3. **School/Center/College:** College for Public Health & Social Justice
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Instructions: Please answer the following **five** questions to the best of your ability for each degree program offered within your department.

1. Summarize your **assessment activities** during the past year for each degree program and how this work relates to the established assessment plan *(e.g. what program outcomes were assessed, faculty discussions, new survey design, data collection, revised assessment plans or learning outcomes, etc.).* Please include how Madrid courses/program were involved.

Context: In the fall of 2016, discussions were initiated to examine the status of CPHSJ's Emergency Management major and minor. (These discussions revisited 2013-2014 discussions about a potential program move to SPS.) Specifically, enrollment in the major continued to be low (e.g. ~30 students total), and there has been consistent interest in the program from non-traditional students who are unable to take courses offered in traditional formats. Ultimately, College and University leadership decided to close the BS in Emergency Management through CPHSJ and explore offering a similar degree through SPS. As such, CPHSJ drafted a plan to phase out in-person emergency management classes while working to ensure that all current Emergency Management majors and minors would be able to complete their degree program. Currently, SPS plans to create a 100% online emergency management degree (set in a context other than public health) to be offered starting in Fall 2018.

With the above context in mind, the following learning outcomes were assessed in 2016-2017 through direct (**capstone project, exam questions**) and indirect (graduation and alumni **surveys**, May 2017) methods:

BS-Emergency Management Outcome 1 (BSEM-LO1): Understand the spectrum of emergency management and its relationship to public health
Direct: Capstone project and data (exam questions) from BST3100-Applied Biostatistics I
Indirect: Graduation exit survey responses

BS-Emergency Management Outcome 2 (BSEM-LO2): Describe the interconnectedness of agencies and organizations involved in emergency management
Direct: Capstone project
Indirect: Graduation exit survey responses

BS-Emergency Management Outcome 3 (BSEM-LO3): Recognize and discuss the effects of actual and potential emergencies on populations
Direct: Capstone project
Indirect: Graduation exit survey responses

BS-Emergency Management Outcome 4 (BSEM-LO4): Apply the fundamental principles of emergency management across its core phases
Direct: Capstone project
Indirect: Graduation exit survey responses

BS-Emergency Management Outcome 5 (BSEM-LO5): Identify and use appropriate communication strategies
Direct: Capstone project
Indirect: Graduation exit survey responses

The capstone project from EMGT-4710 (Disaster Exercise Design) was evaluated independently by two individuals: the Program Director and the CPHSJ Associate Dean for Academic Affairs. Using a standard rubric, each LO was rated as "Does not meet expectations," "Meets Expectations," and "Exceeds Expectations."

In addition, the following assessment activities were conducted:
Direct Assessment: During 2016-2017, a **curriculum review** of all Emergency Management majors and minors was conducted (first in Fall 2016, again after the Spring 2017 semester). This review involved assessment of all completed and outstanding EMGT coursework for each student majoring/minoring in EMGT. The information gathered was used to draft a course sunset plan that will be used by CPHSJ academic advisors to guide students in curriculum planning as the major/minor are phased out.

No Madrid courses/programs were involved in this assessment as Emergency Management courses are not offered in Madrid.

2. Describe specific **assessment findings** related to the **learning outcomes** assessed for each degree program, including any pertinent context surrounding the findings. Please include the **learning outcomes themselves**. *(e.g. Our goal was that 75% of students performed at the "proficient" level of competency in problem solving, using a new scoring rubric. 81% of students performed at the "proficient" level in problem solving, exceeding our expectations.)* Do not include student-level data. Data included in this report should be in aggregate. Please include how Madrid courses/program were involved.

BSEMGT-LO1: Understand the spectrum of emergency management and its relationship to public health.

Direct – Exam Questions: Two questions on the BST3100 final exam (Q5, Q12) that mapped to this outcome were analyzed. To answer these exam questions, students were given multiple data sets to review and analyze. Responses were scored on a 0-3 scale as follows:

- 3 = fully correct
- 2 = generally correct but with a minor error
- 1 = major error
- 0 = no solution or solution did not address the question

Our goal is for the average score on each question to be ≥2.0 (out of 3.0).

The average score of Emergency Management students on Problem 5 was 2.4 / 3.0.
The average score of Emergency Management students on Problem 12, 2.3 / 3.0.

Scores for EMGT majors (n=9) on two final exam questions mapping to BSEMGT-LO1

	0	1	2	3	Average
Final Problem 5	0 (0%)	2 (22.2%)	1 (11.1%)	6 (66.7%)	2.4
Final Problem 12	0 (0%)	2 (22.2%)	2 (22.2%)	5 (55.5%)	2.3

Direct – Capstone Project: The artifact describes the basic epidemiology of Asian H7N9 on page 1-1 and suggests the students recognize that the epidemiology of infectious disease is baseline information required to create an appropriate management response. However, the epi section is general and does not address specific PH trends or methods used to assess infectious disease and make a determination of endemic vs. epidemic (or pandemic) situations. The artifact references CDC and WHO documents, recognizing their importance in emergency preparedness/planning but does not take this to the next level, which would involve discussion of how core areas of PH relate to the spectrum of EM within the context of the project topic. **Meets expectations.**

Indirect – Graduation Exit Survey: The graduation exit survey was administered in April/May 2017, and 25% of the graduating class (n=2 of 8 students) completed the survey. Students were asked to rate their achievement of program learning outcomes on a scale of 1 (very uncomfortable) to 5 (very comfortable). Our goal was that 80% of students would report achievement at a level of 4.0 or higher (comfortable/very comfortable). The average score for BSEM-LO1 was 4.5/5.0.

BSEM-LO2: Describe the interconnectedness of agencies and organizations involved in emergency management

Direct – Capstone Project: The artifact is a multi-site/multi-agency exercise, demonstrating how several agencies have a role in emergency management. This simulation involves participation from the healthcare system (e.g., numerous area hospitals), the STL County Emergency Operations

Center, and the STL City and County Health Departments. The artifact describes the importance of coordination of agencies when responding to infectious disease emergencies (page 1-5). However, there is no description or illustration of how these agencies work together in the simulation. **Meets expectations.**

Indirect – Graduation Exit Survey: The average score reported on the graduation exit survey was 5.0/5.0

BSEM-LO3: Recognize and discuss the effects of actual and potential emergencies on populations

Direct – Capstone Project: At a basic level, the artifact mentions the risk of Asian H7N9 influenza on page 1-1 and includes epi data to illustrate burden of H7N9 to population health (mortality, hospital utilization) were reported for prior epidemics. It notes that a pandemic could "severely" impact public health, but the artifact is limited in detail on the potential impact on the health of the public and lacks discussion and examples to illustrate this. **Meets expectations (low).**

Indirect – Graduation Exit Survey: The average score reported on the graduation exit survey was 5.0/5.0

BSEM-LO4: Apply the fundamental principles of emergency management across its core phases

Direct – Capstone Project: It was not explicitly clear that the exercise applies principles of EM. The exercise in itself is meant to prevent a large negative impact of Asian H7N9 influenza and prepare for and respond to an outbreak. It includes components of transportation (personnel, affected individuals); operational communications (preparedness & response: timely communication for a regional response); and PH, healthcare, and emergency medical services (response and prevention: providing treatment, prevention of additional disease, behavioral health support to affected populations), but it is limited on discussion of how these components and principles play a role in the given situation. **Meets expectations (low).**

Indirect: The average score reported on the graduation exit survey was 5.0/5.0

BSEM-LO5: Identify and use appropriate communication strategies

Direct – Capstone Project: The artifact recognizes the important role of communication in a disaster. Multiple forms of communication are used: text, organizational chart, and tables illustrate information to the intended audience (St. Louis Area Regional Response System). However, the project lacks an explanation of *why* these strategies were used/appropriate, which would take the project to the next level. **Meets expectations.**

Indirect – Graduation Exit Survey: The average score reported on the graduation exit survey was 5.0/5.0

Note: The **alumni survey** was distributed via email in 2016 to students who graduated in 2015. Only 1 EM graduate responded to the survey. As these results could be identifiable, they are not presented here. The alumni survey administered in 2017 to May 2016 graduates will be analyzed after it is sent to 2016 Aug/Dec graduates in the fall of 2017.

Additional Direct Assessment: The **curriculum review** found that nearly all EMGT majors/minors can complete their EMGT courses in 2017-2018 if a change is made to the teaching schedule. Specifically, EMGT-4700: Advanced Emergency Management), traditionally a fall-only course, will be offered in spring 2018. This will allow students who take the pre-requisite in the fall to take EMGT4700 the following semester rather than waiting an additional semester, until Fall 2018. It is recognized that some students may be unable to complete all EMGT courses in 2017-2018 due to Leave of Absence or study abroad; these students will be offered independent study or course substitutions, determined on a case-by-case basis and dependent upon individual student situations.

**Please attach any tables, graphics, or charts to the end of this report.*

3. Describe how assessment **feedback** has been provided to students, faculty, and staff. *(e.g. report for faculty, executive summary for the dean, web page for students, alumni newsletter, discussion with students in class or club event, etc.)*

This assessment report will be posted on the CPHSJ undergraduate emergency management googlesite. A notice with a link to the googlesite will be put in first Weekly Mailer sent to students and faculty/College administration at the start of the fall 2017 semester.

Additionally, this report will be provided to the members of the Undergraduate Public Health Steering Committee (responsible for decisions about program policies/curriculum for the biostatistics, emergency management, health management, and public health degrees), as well as the CPHSJ SGA and AAC representatives.

4. In what ways have you **used assessment findings** to celebrate student achievements and/or to improve the curriculum this past year? *(e.g. prizes to students, hosting student parties, changes to curriculum, student projects, learning goals, assessment strategies, etc.)*

Celebration of Student Achievement: The Outstanding Bachelor of Science in Emergency Management Graduating Senior Award was created in May 2016. Consistent with the criteria for outstanding senior public health and health management students, this award recognizes a graduating emergency management student with leadership performance and potential, scholastic achievement, and manifestations of the College Covenant in personal conduct. Emergency management majors and faculty teaching in the degree program vote on the award recipient. This award was given at the CPHSJ student awards ceremony in May 2016 and May 2017. Additionally, one emergency management student was selected to represent the major at the University's 2017 Senior Legacy Symposium.

(Past) Curriculum Changes: Two important recent curriculum changes occurred as a result of program assessment:

1. *Science core curriculum change:* Program assessment data (e.g., focus groups, exit survey) and conversations with the Department of Biology indicated that BIOL1040/1060 may not be the best course sequence for meeting the EM core requirement for two primary reasons:
    a. The Emergency Management field includes work in environmental, biologic, chemical, radiologic, and nuclear threats. Restricting the science core to BIOL1040/1060 limits EM students who have interests in aspects of the field beyond biologic threats.
    b. BIOL1040/1060 is structured to meet the needs of premed students, and the content is more in-depth than needed by students who will not take additional Biology coursework.

Effective Fall 2016, the Emergency Management science core was changed to require students to

take 8 credits of science coursework from EAS and/or BIOL, with other sciences courses allowed by exception (e.g. CHEM, PHYS). (Note: CHEM and PHYS were not specifically included in options due to Department capacity limitations.) This change also removes a barrier to students progressing towards graduation when they are unable to register for BIOL1040/1060 due to course closures.

2. *Change in required major courses:* The Emergency Management degree originally required three graduate-level public health courses. Through course evaluations, focus groups, and conversations with mentors/advisors, Emergency Management students consistently voiced discontent with the need to take these courses, largely because students were restricted to 15cr in semesters in which they were enrolled in graduate courses, and the courses carried a minimum grade of B-. Additionally since the EMGT degree was created, Council on Education for Public Health (CEPH) accreditation criteria changed to require all CPHSJ undergraduates to take an introductory public health course (PUBH2100), regardless of major. Lastly, CPHSJ created upper-level undergraduate epidemiology (EPI4000) biostatistics (BST3100) courses, which were first offered in 2016-2017. For these reasons, effective for freshman entering in Fall 2014, the required graduate courses were replaced with undergraduate courses in the BS Emergency Management curriculum as follows:

Graduate course removed	Replacement course
Epi-500	EPI-4000: Introduction to Epidemiology
BST-500	BST-3100: Intro to Biostatistics I
EOH-500	PUBH-2100: Introduction to Global Health

5. Describe any changes to your assessment plans, or any challenges or educational experiences with the **assessment process** this past year that you would like to share.

Challenges: Because of the uncertain future the Emergency Management program faced in 2016-2017 (i.e., discussions about the closure of the program through CPHSJ and exploration of opening an Emergency Management program through SPS), assessment plans were affected. Namely, 2016-2017 program assessment largely focused on curriculum review for individual students and subsequent plans for phasing out in-person classes and closing CPHSJ's Emergency Management program. Additionally, due to the University policy to phase out 0-cr courses, the 0-cr Senior Symposium needed to be eliminated and components worked into other existing EMGT courses.

Originally, it was anticipated that in 2016-2017, Emergency Management students in EMGT4967-Seminar in Emergency Management (formerly HMP4967) would complete a capstone project mapped to program learning outcomes. Because the HMP4967 was a 0-cr course and would be phased out in 2017-2018, the capstone project was instead implemented in EMGT4710 – Disaster Exercise Design, as the nature of that course fit best with the concept of a capstone project. However, as the instructor implemented this as a class project, only one artifact (an emergency preparedness exercise) that reflected all of the students in the class. It was not clear which students were responsible for the various sections of the document. The exercise reads like an organizational document (i.e., use of agency language), and therefore this assessment is limited in its ability to truly know if the artifact reflects the students' work in this class and the BSEM program overall.

It was planned that students would also complete a portfolio demonstrating achievement of learning outcomes (e.g. with artifacts and reflection). However, as the focus this year was implementation of the capstone project, the learning outcome portfolio will be implemented in 2017-2018, the last year in which CPHSJ will offer Emergency Management courses.

Revised plan: Although 2017-2018 is the last year CPHSJ anticipates offering in-person EMGT classes, ***program LO4: Apply the fundamental principles of emergency management across its core phase*** will be assessed using artifacts from the introductory and advanced emergency management courses (EMGT1700 and EMGT4700, respectively) taught in Fall 2018.

Following the model used in the Public Health major, EMGT students will complete individual program learning outcome portfolio in Spring 2018, which will be reviewed in summer 2018 for achievement of **all program learning outcomes**.

Graduation exit surveys will be administered until all CPHSJ EMGT majors graduate. After closure of CPHSJ's EMGT degree, alumni surveys will be administered every 5 years post-graduation until 5 years after the final class graduates. As part of these surveys, students will report perceived achievement of **all program learning outcomes**.

*Please submit any **revised/updated assessment plans** to the University Assessment Coordinator along with this report.*

Results from the May 2017 Graduation Exit Survey: Assessment of Program Learning Outcomes

LO1: Understand the spectrum of emergency management and its relationship to public health			
	#	%	Cum %
Very comfortable (5.0)	1	50.0	50.0
Somewhat comfortable (4.0)	1	50.0	100.0
Neither comfortable nor uncomfortable (3.0)	0	0.0	100.0
Somewhat uncomfortable (2.0)	0	0.0	100.0
Very uncomfortable (1.0)	0	0.0	100.0

LO2: Describe the interconnectedness of agencies and organizations involved in emergency management			
	#	%	Cum %
Very comfortable (5.0)	2	100.0	100.0
Somewhat comfortable (4.0)	0	0.0	100.0
Neither comfortable nor uncomfortable (3.0)	0	0.0	100.0
Somewhat uncomfortable (2.0)	0	0.0	100.0
Very uncomfortable (1.0)	0	0.0	100.0

LO3: Recognize and discuss the effects of actual and potential emergencies on populations			
	#	%	Cum %
Very comfortable (5.0)	2	100.0	100.0
Somewhat comfortable (4.0)	0	0.0	100.0
Neither comfortable nor uncomfortable (3.0)	0	0.0	100.0
Somewhat uncomfortable (2.0)	0	0.0	100.0
Very uncomfortable (1.0)	0	0.0	100.0

LO4: Apply the fundamental principles of emergency management across its core phases			
	#	%	Cum %
Very comfortable (5.0)	2	100.0	100.0
Somewhat comfortable (4.0)	0	0.0	100.0
Neither comfortable nor uncomfortable (3.0)	0	0.0	100.0
Somewhat uncomfortable (2.0)	0	0.0	100.0
Very uncomfortable (1.0)	0	0.0	100.0

LO5: Identify and use appropriate communication strategies			
	#	%	Cum %
Very comfortable (5.0)	2	100.0	100.0
Somewhat comfortable (4.0)	0	0.0	100.0
Neither comfortable nor uncomfortable (3.0)	0	0.0	100.0
Somewhat uncomfortable (2.0)	0	0.0	100.0
Very uncomfortable (1.0)	0	0.0	100.0