

# Biosecurity and Pandemics, Undergraduate Certificate

## Goal 1: Develop Certificate Courses Fully

**Goal Description:**

This goal relates to certificate offerings being fully completed in design

**Providing Department:** Biosecurity and Pandemics, Undergraduate Certificate

**Progress:** Completed

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

**Performance Objective for Goal 1**

**Performance Objective Description:**

Develop certificate courses fully - finalize course material.

RELATED ITEM LEVEL 2

**New KPI, Target, and Results Item for Goal 1: Develop Certificate Courses Fully**

**KPI Description:**

KPI 1 - all courses in the certificate will be fully developed

KPI 2 - course content will be assessed to ensure student performance can be adequately measured

KPI 3 - undergraduate director will oversee adjunct and full faculty familiarity with courses and best practices in delivery

**Target Description:**

KPI 1 - by Fall 2024 all PDL courses will be completed in 5 week design

KPI 2- in 2023/2024 course content will be assessed for appropriate exercises testing student achievement

KPI 3 - all faculty and adjuncts will review course content and submit any required changes to Master Copies of all courses within certificates

**Results Description:**

All courses in the certificate have been designed. In Fall 2023 formal assessment by the department necessitated changes in course design to include exercises - 3 critical thinking and 2 applied - as norm for student measure of content mastery. In Spring 2024 all courses in the certificate were augmented by said exercises. In Fall 2023 and Spring 2024 all faculty already teaching courses contained in the certificate provided editing, review, and reports of changes. Courses not yet taught have yet to be reviewed as adjunct faculty get assigned to teaching them.

RELATED ITEM LEVEL 3

**Action for Goal 1: Develop Certificate Courses Fully**

**Action Description:**

There are few courses within the certificate that have yet to be taught. For year 2024/2025 if those courses have full enrollment, faculty will be tasked with completing their reviews to ensure content excellence.

## Goal 2: Recruit Students into Certificate

**Goal Description:**

This goal pertains to activities at the department aiming to increase enrollment in the new certificate

**Providing Department:** Biosecurity and Pandemics, Undergraduate Certificate

**Progress:** Ongoing

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

**Performance Objective Item for Goal 2**

**Performance Objective Description:**

Conduct recruitment efforts to increase enrollment in the Biosecurity & Pandemics undergraduate certificate.

RELATED ITEM LEVEL 2

**New KPI, Target, and Results Item for Goal 2: Recruit Students into Certificate**

**KPI Description:**

KPI 1 - Recruitment efforts among incoming freshmen, in undergraduate classes, and in professional organizations

KPI 2 - Recruitment via conferences

KPI 3 - recruitment via UNIV 1101

**Target Description:**

KPI 1 - fliers and information sheets will be disseminated by Department administration and faculty at freshmen events, professional organizations, and undergraduate classes

KPI 2 - Faculty/staff will attend at least one conference where certificate will be promoted in vendor area

KPI 3 - Faculty teaching UNIV 1101 will promote the certificate in class

**Results Description:**

The new Undergraduate Program Director personally attended Bearkat week, Saturdays at Sam, new freshmen orientations, parent of freshmen orientation working with Luke Putnam on flyer distribution during all those events. Dr. Denham attended Texas Division of Emergency Management (TDEM) conference in May 2024 where the Department and Miss Carlson had set the vendor tent and advertised the certificate during presentation and during vendor exhibitions. Dr. Denham promoted the certificate during the annual conference of Emergency Management of Texas (EMAT) in March 2024 and at the Memorial Hermann Hospital System, Humble location in December 2023 and during LIFE at LEMIT in January 2024 and March 2024. Finally, Dr. Denham advertised the certificate in her Fall 2023 UNIV 1101 course. Other efforts consisted of Senior Director for Strategy and Innovation efforts at COCJ to promote the certificate.

RELATED ITEM LEVEL 3

**Action for Goal 2: Recruit Students into the Certificate**

**Action Description:**

One significant progress has been the establishment of the position of the Undergraduate Program Director and consistent and sustainable recruitment efforts on part of the Director, Department and COCJ staff. However, no assessment has been possible due to no enrollment in the certificate to date. The Department will focus 2024/2025 efforts on working with Senior Director for Strategy and Innovation in seeking strategies for recruiting.

# Goal 3: Provide Strong Knowledge Base

## Goal Description:

The Undergraduate Certificate in Biosecurity and Pandemics provides students with a strong knowledge base regarding disease threats; pandemic preparedness and management; bioterrorism; public health policies and laws (both domestic and international); and the nexus between border security and public health as it pertains to unique challenges along the US-Mexico border.

**Providing Department:** Biosecurity and Pandemics, Undergraduate Certificate

**Progress:** Ongoing

## RELATED ITEMS/ELEMENTS -----

### RELATED ITEM LEVEL 1

**Learning Objective for Goal 3: Students will demonstrate knowledge and awareness of bio -threat in the United States**

#### Learning Objective Description:

Students will investigate the threat posed to the United States by bioterrorism.

### RELATED ITEM LEVEL 2

**New Indicator, Criterion, and Findings Item for Learning Objective for Goal 3:**

#### Indicator Description:

Students knowledge of bio-preparedness as well as student awareness of bio-security threats will be measured as reflected by scores in their critical thinking as well as applied exercises scores in certificate courses.

#### Criterion Description:

70% average class scores in all critical thinking exercises and 70% average class scores in all applied exercises in all certificate courses

#### Findings Description:

This certificate has had no enrollment for 2023/2024 to assess

### RELATED ITEM LEVEL 3

**Action for Goal 3: Provide Strong Knowldge Base**

#### Action Description:

Because there were no students enrolled in the certificate for 2023/2024, it was impossible to assess learning outcomes. However, the Department had difficulty obtaining scores and diagnostics for exercises in PDL courses and will focus its attention on streamlining access for 2024/2025 when we hope to welcome first students into the certificate.

## New Update to Previous Cycle's Plan for Continuous Improvement Item

**Previous Cycle's Plan For Continuous Improvement (Do Not Modify):**

### Closing Summary

Targeted emails will be sent to students who have completed at least one of the required courses for the Biosecurity and Pandemics Certificate encouraging their enrollment in the certificate program. Emails will be sent and tracked through EMMA, with follow-up enrollment reports run to capture any new student enrollment.

Multiple Learning Objectives and indicators will also be identified to incorporate in the 2023-2024 assessment plan.

### Update of Progress to the Previous Cycle's PCI:

Targeted emails were sent to students who have completed at least one of the required courses for the Biosecurity and Pandemics Certificate encouraging their enrollment in the certificate program.

The 2023-2024 assessment plan identified various KPIs and initial learning objectives. However, to date the certificate has not secured enrollment/.

## **New Plan for Continuous Improvement Item**

### **Closing Summary:**

The Department will work with the Senior Director for Strategy and Innovation as well as with Institute for Homeland Security to find ways to recruit students into the certificate. The Undergraduate Program Director will continue marketing efforts through agencies, conferences, freshmen events, courses, and other venues. As first students enroll, we will be able to monitor their progress on objectives. We will also ensure that courses not yet taught will be diligently assessed by faculty teaching them for the first time and we will streamline methods to receive exercises results/score data at the Department after each class session.