

2018-19 Biotechnology Annual Program Plan

I.A. Program Profile: Purpose

Describe the program(s) to be reviewed. What is the purpose of the program and how does it contribute to the mission of Skyline College?

Narrative

Biotechnology contributes to the College mission and goals by providing preparation for transfer to a baccalaureate institution and for workforce development. We are developing a strong connection to our feeder schools with our 400 level dual enrollment courses and are planning on creating a robust curriculum for our post baccalaureate population. The goals of BTEC courses include providing tools for students to make wise decisions regarding their professional careers, and to evaluate the ethics of their craft. We are committed to the strategic priority of providing learning opportunities that prepare students for their future careers. Courses numbered 100 and 200 are meant to articulate with the Community College Bachelors programs at Solano and Mira Costa colleges. The short certificates and coop programs are meant to gain experiences for students under a cGMP environment. The core program for BTEC majors consists of two courses, BTEC 400 (Intro to biotech) and BTEC 170/171 (Biology for Biotech). The 100 level courses are General education that meet the needs of students even if they do not go on in BTEC. The 200 level course are designed primarily to advance the students articulation with other Biotechnology Manufacturing programs as well as to develop work related skills. The 400 level courses can be taught as Dual enrollment with the high schools and are meant to facilitate matriculation of students to Skyline. The primary goal of this program is to prepare underrepresented students for employment in local biotech companies. We are working with local feeder high schools to move students into biotech by aligning and articulating our Btec courses with the 1 or 2 year experiences at the high schools. We are also looking to prepare students with a bachelors to go into the biotech work force.

I.B. Program Planning Team

Annual program planning is intended to be a collaborative process which promotes dialogue and reflection. Please identify all individuals who contributed to or shaped the narrative. Include names and the title or role of each person.

Narrative

Jing Folsom

Nick Kapp

Elsa Jimenez-Samayoa

II.A. Analysis: Progress on Prior Program Objectives (Goals) and Activities

Describe the progress made on previously established program objectives (goals) including identification of achievements or areas in which further effort is needed. New programs which have not yet established CPR/APP objectives should discuss progress on program implementation or activities.

Narrative

BIOL 430 and BIOL 426 are being assessed for Information Literacy (SP) citizenship by the end of the 2019-2020 cycle. BTEC 400, BTEC 150 and BTEC 210 will be assessed for Information Literacy citizenship by the end of the 2020-2021 cycle.

II.B. Analysis: Program Environment

Describe any recent external or internal changes impacting the program or which are expected to impact the program in the next year. Please include when the specified changes occurred or are expected to occur.

Narrative

ok, We need to look at data. Our main thing is that our numbers are low. We are working with the local high schools, SSF, Carlmon and San Mateo as well as SF schools to recruit more students to our program. The main thing is that we are competing with more well established programs like nursing, surge tech ect. We are working with the CTE department to get internships and work on making sure that students have a clear pathway to employment in biotechnology in the area.

Can look at our number and see if they are going.

Internal

The BTEC program is new and will have a relatively small load as the program develops. Recent research into the CAA programs has shown that word of mouth is typically the best way to recruit students. We have just completed our first two years of the program and are ramping up for our third year. We are on our second year at Carlmont and our First year at SSUHD. Signs are positive that students dual enrolled in Biotechnology in these programs will be signing up for our program.

External

With a current unemployment rate of 4.5% there is a lot of competition between biotech companies for educated workers. However there still is a bias against workers who do not have a bachelors degree and the experience that our students have may not be enough for them to gain jobs. We are also continuing our partnership with BABEC, and continue working with Genentech.

II.C. Analysis: Student Learning Outcomes (SLOs and PSLOs)

- (1) Instructional Programs Only: Describe what was learned from the assessment of course SLOs for the current and past year.
- (2) Student Service Programs Only: If PSLOs are being assessed this year (3-year cycle), describe what was learned. If no assessment was done because this is an off-cycle year, please state that this item is not applicable.

Narrative

This is a relatively new program. We are still in the process of evaluating our SLO's and ISLO's.

III.A. Reflection: Considering Key Findings

Consider the previous analysis of progress achieved, program environment, and course-level SLOs or PSLOs (if applicable). What are the key findings and/or conclusions drawn? Discuss how what was learned can be used to improve the program's effectiveness.

Narrative

This is a new program, we are still working on evaluating SLO's

III.B. Reflection: ISLOs

If your program participated in assessment of ISLOs this year:

- (1) What are the findings and/or conclusions drawn?
- (2) Does the program intend to make any changes or investigate further based on the findings? If so, briefly describe what the program intends to do.

Narrative

still undergoing assessment on 3 year cycle. Working on citizenship and critical thinking. Hail Hydra.

IV.A. Strategy for Program Enhancement: Continuation/Modification

Indicate whether the program is continuing implementation of the last CPR strategy or revising the strategy. Please describe the modifications if revisions are intended.

Note: Any new strategies should be linked to Institutional Goals through creation of objectives in the next section. If the program has not yet participated in comprehensive program review, an annual or multi-year strategy can be defined in this item.

Narrative

Skyline College Bio-manufacturing is dedicated to Career Technical Education and to our Skyline College students. We feel the program will especially serve and be useful for under representative minorities. Currently, we have two full time instructors in the Biotechnology Program teaching all certificate and associate degree related courses. We also have one part time Internship Program Coordinator who support students with resume writing and soft skill practicing. We launched a "Lunch & Learn" Series to facilitate students learning about careers. The Bio-manufacturing Student Club was established to help students form a learning community around biotechnology manufacturing.

We offer a Biotechnology Manufacturing Assistant certificate and a Biotechnology Manufacturing Technician certificate. We also offer an Associate Degrees in Biotechnology Manufacturing Technician. Furthermore chose to align our courses to articulate with the Community College Bachelors programs at Solano and Mira Costa colleges.

IV.B. Strategy for Program Enhancement: Action Plan and Resource Requests

Based on the most recent CPR and any desired modifications, develop an annual action plan with related resource requests. No narrative response will be entered in this section, but the objectives you create will be printed automatically in the APP report under this item.

(1) To begin, click on PLANNING at the top of the page, then CREATE A NEW OBJECTIVE. To view previously created objectives, click PLANNING at the top of the page, then VIEW MY OBJECTIVE.

(2) IMPORTANT! Make sure to associate each objective to this standard in the APP. Need help? Contact the PRIE Office for further instructions. Institutional Goals. Need help? Contact the PRIE Office for further instructions.

Narrative

Program just started need an operating budget for materials and supplies.
Hiring short term temporary lab technician or instructional aid.

Associated Objectives

[827-Biotechnology Program aims to prepare students to enter the workforce in the biotechnology field.](#)

Enhanced Budget with Objectives and Tasks

[Budget with Objectives of Biotechnology unit](#)