

Biotechnology Program at Santa Monica College (SMC)

Minutes - Advisory Committee [Urgent] Meeting

Friday, June 7, 2024, 1:00 PM - 2:00 PM

I. Call to Order – 1:04pm

The Biotechnology Program Advisory Committee [urgent] meeting was held via Zoom. Karol Lu, Ed.D., Project Manager, called the meeting to order at 1:04pm on Friday, June 7, 2024.

II. Welcome & Introductions – 1:05pm

Dr. Karol Lu welcomed *six members* from industry and *two program faculty* members in attendance. All advisory committee members as well as faculty members introduced themselves:

In attendance – Name, Title, and Association

Andria Denmon, Ph.D., Associate Professor, Santa Monica College

Thomas Chen, Ph.D., Professor, Santa Monica College

Wendie Johnston, Ph.D., Lab Manager, Pasadena Bio Collaborative Incubator

Damon Tighe, Curriculum Training Specialist, Biorad

Brendan Amer, Ph.D., Principal Investigator, Amgen

Farahnaz Forozan, Ph.D., President/CEO, Vash

Afomia (Mia) Seleshi, M.B.A, Director of Alumni Career Engagement, UCLA, Co-Founder/Co-CEO of Ethiopian Legacy

Nevija Watson, M.S., Director of Clinical Manufacturing, Kite Pharma

Wondwossen (Wonde) Teka, M.B.A., Co-Founder/Co-CEO of Ethiopian Legacy

III. New Business – 1:11pm

a. Program Updates

Dr. Andria Denmon provided the committee members with a program update on recently approved Certificates of Achievement (CoA) and A.S. Degree. The Biotechnology Program offered its first course, BIOL 30, to the first cohort. Both CoAs I & II have been approved by CCCC:

CoA I: Biotechnology/Life Sciences Laboratory Technician (23 units)

CoA II: Biotechnology & Cell Science Laboratory Technician (39 units)

A.S. – Biotechnology degree, current required courses (GE courses not listed):

CHEM 10 – Introductory to General Chemistry

CHEM 11 – General Chemistry I

ENGL 1 – Reading & Composition

ENGL 2 – Reading & Composition

MATH 54 – Elementary Statistics

MCRBIO 1 – Fundamentals of Microbiology

BIOL 90A – Life Sciences Internship

BIOL 30 – Fundamentals of Biotechnology I

BIOL 31 – Fundamentals of Biotechnology II

BIOL 32 – Cell Culture Methods & Techniques

BIOL 33 – Immunoassay Methods

BIOL 34 – Science Communication for Regulated Environments

BIOL 35 – Nanobiotechnology: A Survey Course

BIOL 36 – Quality Control & Assurance

i. Course Prerequisite Requirement(s)

Dr. Denmon discussed the need for advisory committee members' recommendation and feedback on course prerequisite(s) options for BIOL 31 – Fundamentals of Biotechnology II. The current prerequisite options in the course outline of record are:



- BIOL 3 – Fundamentals of Biology
- BIOL 21 – Cell Biology and Evolution
- BIOL 31 – Fundamentals of Biotechnology II

Dr. Denmon spoke about the need for students who enroll in BIOL 31 – Fundamentals of Biotechnology II to be better prepared for a second semester biotechnology course. Students who meet the prerequisite requirement by completing either BIOL 3 – Fundamentals of Biology or BIOL 21 – Cell Biology and Evolution, may not be receiving the appropriate technical preparation compared to those who have met the prerequisite requirement by completing the BIOL 30 – Fundamentals of Biotechnology I course.

ii. Program Requirements - A.S. – Biotechnology

Dr. Denmon discussed SMC’s Curriculum Committee recent recommendation to remove CHEM 10 – a preparatory course for CHEM 11 – General Chemistry, as a requirement. Justification for the removal of CHEM 10 from the A.S. degree includes students’ option to take a placement/challenge chemistry exam that may waive the course, or Advanced Placement score of 3 or higher. CHEM 10 remains on CoA I&II.

iii. Open Discussion – Committee Members

Prerequisite Requirement(s):

Dr. Wendie Johnston spoke about having students with more experience in the first semester class to serve as mentors within the course to assist other students. Mr. Damon Tighe had a question on whether the removal of the two options (BIOL 3 – Fundamentals of Biology or BIOL 21 – Cell Biology and Evolution) as a prerequisite course for BIOL 31 – Fundamentals of Biotechnology II would limit the number of students from enrolling in BIOL 31. Dr. Denmon mentioned that there are other ways to recruit students into the program. Dr. Lu added that neither BIOL 3 or 21 is required for the CoAs or A.S. degree, but that BIOL 30 still stands as a requirement.

Program Course Requirement(s):

Dr. Farahnaz Forozan asked whether a modification to the A.S. degree to remove CHEM 10 - Introductory General Chemistry would require a “re-certification” or approval. Dr. Denmon explained that the committee’s recommendation for the removal of CHEM 10 - Introductory General Chemistry, would require the updates to be approved by the Los Angeles Regional Consortium. Dr. Brendan Amer asked whether biotechnology students will have paths to take a chemistry course since he believed that general chemistry coursework or its equivalent is necessary for the biotechnology workforce. Dr. Lu explained that the removal of CHEM 10 - Introductory General Chemistry will not impact the requirement for students to complete CHEM 11 – General Chemistry I, which is the first semester of general chemistry. CHEM 10 - Introductory General Chemistry is the preparatory course for general chemistry. Dr. Amer, Mr. Tighe, and Ms. Nevija Watson agreed that students need general chemistry coursework (CHEM 11) but not necessarily the preparatory chemistry course (CHEM 10)

IV. Action Items – 1:27pm

a. Course Modification: BIOL 31 – Fundamentals of Biotechnology II - Official Vote

Dr. Forozan made a motion to recommend a *modification to remove two of the prerequisite options for BIOL 31 – Fundamentals of Biotechnology II course*. The two mentioned prerequisite options are as follow:

- BIOL 3 – Fundamentals of Biology
- BIOL 21 – Cell Biology and Evolution

This motion was seconded by Damon Tighe. Vote count: (7) In Favor, (0) Opposed, (0) Abstained. **The motion passed unanimously.**

b. Program Modification – A.S. – Biotechnology degree – Official Vote



Damon Tighe made a motion to recommend a *modification to the A.S. – Biotechnology degree to remove the following course as a requirement*:

- CHEM 10 - Introductory General Chemistry

This motion was seconded by Dr. Forozan. Vote count: (7) In Favor, (0) Opposed, (0) Abstained. **The motion passed unanimously.**

V. **Meeting Summary** – 1:29pm

a. Committee Recommendations

- Recommends a course modification to remove two prerequisite options for BIOL 31 – Fundamentals of Biotechnology II. The two prerequisite courses are as follow:
 - BIOL 3 – Fundamentals of Biology
 - BIOL 21 – Cell Biology and Evolution
- Recommends a program modification to the A.S. – Biotechnology degree to remove CHEM 10 - Introductory General Chemistry as a requirement.

VI. **Announcements** – 1:31pm

- Advisory Committee Chairperson – the committee is seeking a chairperson.
- Next Meeting Date, Time, Location – September 2024, beginning of the Fall 2024 semester. Details TBA.

VII. **Adjournment** – 1:32pm

Minutes recorded and submitted by Karol Lu, Ed.D., Project Manager, pending approval.

