


 Dept - (BHES) Biology


**Program Mission Statement:** To transfer students majoring in Biology to a 4 year college to complete their 4 year degree in Biology, to provide prerequisite preparation for nursing and allied health students, and to provide general education lab science courses for students majoring in other disciplines at De Anza College.



**I.A.1 What is the Primary Focus of Your Program?:** Transfer

**I.A.2 Choose a Secondary Focus of Your Program?:** Career/Technical



**I.B.1 Number Certificates of Achievement Awarded:**



**I.B.2 Number Certif of Achievement-Advanced Awarded:**



**I.B.3 #ADTs (Associate Degrees for Transfer) Awarded:**

**I.B.4 # AA and/or AS Degrees Awarded:** 31



**I.C.1. CTE Programs: Impact of External Trends:** N/A

**I.C.2 CTE Programs: Advisory Board Input:** N/A

**I.D.1 Academic Services & Learning Resources: #Faculty served:**

**I.D.2 Academic Services & Learning Resources: #Students served:**

**I.D.3 Academic Services & Learning Resources: #Staff Served:**

**I.E.1 Full time faculty (FTEF):** 23

**I.E.2 #Student Employees:** 0

**I.E.3 % Full-time :** Full-time faculty teaching went from 37.1% to 37.2%. Part-time faculty teaching went from 58.8% to 57.8%.

**I.E.4 #Staff Employees:** 0

**I.E.5 Changes in Employees/Resources:** Part-time % has increased 14% over the last 4 years and full-time % has decreased 20% over the last 4 years which has impacted our enrollment.

**II.A Enrollment Trends:** With a decrease in full-time faculty over the past 4 years, we've seen a subsequent decrease in student enrollment. The department feels that hiring more full-time faculty would help recapture student enrollment. The Biology department continues to see long wait lists and student demand in the prerequisite Bio 40 series and the Biology majors 6 series courses.

**II.B.1 Overall Success Rate:** The overall success rate has remained relatively constant over the past three years, but increased by 1% in the last year to 74%

**II.B.2 Plan if Success Rate of Program is Below 60%:** N/A

**II.C Changes Imposed by Internal/External Regulations:** None at this time

**III.A Growth and Decline of Targeted Student Populations:** The percentage of targeted student populations in relation to the total number of students served by our department either remained the same (African American students) or increased (Latina/o students showed a 2% increase while Filipino students showed a 1% increase).

**III.B Closing the Student Equity Gap:** We have reached out to more students via outreach, we are providing more hands on laboratory experiences, the science resource center has been provided with resources for students to practice and perfect their skills. In addition, tutoring for Spanish speaking students in Biology has been initiated by one of our faculty members and has been very successful.

**III.C Plan if Success Rate of Targeted Group(s) is Below 60%:** N/A

**III.D Departmental Equity Planning and Progress:** To reach out to our strong enrollment growth in the Latino/a student population - we have started tutoring in Spanish in both Biology and Chemistry. We also continue to utilize technology in our classrooms, website locations for course information, email access and office hour availability for students to interact and ask questions as needed.

**IV.A Cycle 2 PLOAC Summary (since June 30, 2014):** 0% of PLO statements assessed to date.

**IV.B Cycle 2 SLOAC Summary (since June 30, 2014):** 31% of SLO Statements Assessed.

**V.A Budget Trends:** Biology budget continues to see a successive decrease in funding despite a growth in enrollment. In order to sustain continued growth, we do need to have an increase to our B budget funding.

**V.B Funding Impact on Enrollment Trends:** Nearly all Biology classes involve labs and hands on learning experience for students. It is extremely important that we be able to provide all our students, but especially our targeted students, with sufficient resources to maximize student success. We cannot do this without increased funding.

**V.C.1 Faculty Position(s) Needed:** Replace due to vacancy

**V.C.2 Justification for Faculty Position(s):** Our FT to PT faculty ratio remains low and to provide students with the optimum opportunity to succeed they do require FT faculty who can commit to needed department work outside of just teaching. If we do lose a position due to retirement etc., it is very essential that we be able to replace this position. We are experiencing a high demand for Biology 6 and Biology 40 sections per student e-mails.

**V.D.1 Staff Position(s) Needed:** Growth position

**V.D.2 Justification for Staff Position(s):** Laboratory technicians (2) to support our growing enrollment and course offerings and for evening/weekend courses. Staff position for Science Resource Center to allow the center to be open evenings and weekends.

**V.E.1 Equipment Requests:** Over \$1,000

**V.E.2 Equipment Title, Description, and Quantity:** Autoclaves, centrifuges, media dispenser, models for Anatomy and Physiology, EKG machine, Thermocycler/PCR machine, Chest freezers, Ophthalmoscopes; Refrigerators, Incubators, Microscopes (compound and dissecting), Stethoscopes, Blood pressure cuffs, Beakers, Flasks, Graduated cylinders, Petri dishes, UV light sources, Gel electrophoresis chambers, On-going lab supplies, Desk chairs, Laboratory glassware washers, water baths, media dispenser, heating blocks, general biology models, Zoology models, Botany models, Power supplies, tents, sleeping bags, physiology testing kits, Ecology testing kits, prepared slides, test tubes, gloves, slides and coverslips, hot plates, biology posters, poster holder, aquariums and related materials, aprons, safety goggles, pipettors, pipettes, Bacteriostats, electronic balances, dissecting equipment (trays, needles, probes, scissors, scalpels, etc.), stopwatches, portable dry spirometers, convertible hand truck.

**V.E.3 Equipment Justification:** This equipment will be used by faculty, students and lab technicians. The equipment will allow students to have greater opportunity at hands on experience leading to

increased student success and retention. This new equipment will last for more than 10 years and will help us attain the goal of decreasing the equity gap and increasing student success and retention.

**V.F.1 Facility Request:** A second biohazard laboratory with new furniture, lighting and smart room set up. Additional dedicated classroom for course offerings given our enrollment growth.

**V.F.2 Facility Justification:** We have a continued increased demand for the Bio 6 series as part of our transfer pathway, Bio 26 as part of the Allied Health/Nursing prerequisites, and the Bio 40 series. Our inability to offer more sections due to lack of facilities has us unable to meet student demand.

**V.G Equity Planning and Support:** Our equity planning will allow us to provide students with greater opportunity at hands on experience through laboratory activities and to review course material outside the traditional classroom environment in the resource center and tutoring sessions leading to increased student success and retention and will enable us to decrease the equity gap while continuing to increase our enrollment in the targeted student populations.

**V.H.1 Other Needed Resources:** Additional tutors to work with students

**V.H.2 Other Needed Resources Justification:** Our equity planning will allow us to provide students with greater opportunity at hands on experience through laboratory activities and to review course material outside the traditional classroom environment in the resource center and tutoring sessions leading to increased student success and retention and will enable us to decrease the equity gap while continuing to increase our enrollment in the targeted student populations.

**V.J. "B" Budget Augmentation:** \$60,000.00. Students and faculty will be supported by the budget. Without the funds, student access to Biology classes would be seriously impacted. The increase in budget will help us attain the goal of decreasing the equity gap and increasing student success.

**V.K.1 Staff Development Needs:** None at this time

**V.K.2 Staff Development Needs Justification:**

**V.L Closing the Loop:** We will continue to aggressively pursue our goal to decrease the equity gap and increase student success as indicated in the College Mission Statement

**Submitted by:** Jason Bram  
bramjason@deanza.edu; x8654

**Last Updated:** 03/21/2017

**APRU Complete for 2016-17:** Yes

**#SLO STATEMENTS Archived from ECMS:**

