

Bakersfield College 2018-2019 Program Review – Annual Update

Program Name: Animal Science

Bakersfield College Mission: Bakersfield College provides opportunities for students from diverse economic, cultural, and educational backgrounds to attain Associate and Baccalaureate degrees and certificates, workplace skills, and preparation for transfer. Our rigorous and supportive learning environment fosters students' abilities to think critically, communicate effectively, and demonstrate competencies and skills in order to engage productively in their communities and the world

Describe how the program supports the Bakersfield College Mission: The Agriculture Department is a Career Technical Education (CTE) department. Therefore, our certificate programs align us with one of the core missions of Bakersfield College, and that is to supply trained individuals to work in vocational jobs of regional agricultural businesses. Agricultural supervisory level jobs have increased about 4% in Kern County and in California. This is the highest percentage growth of any major occupational category. These jobs require a minimum of an associate degree and two years of experience.

Instructional Programs only:

- A. List the degrees and Certificates of Achievement the program offers: AST, AS, JSC and Certificates
- B. If your program offers both an A.A. and an A.S. degree in the same subject, please explain the rationale for offering both and the difference between the two.
- C. If your program offers a local degree in addition to the ADT degree, please explain the rationale for offering both.: The Vet tech offers a JSC for those students wishing to work at vet hospitals.

Program Goals:

- A. List the program's current goals. For each goal (minimum of 2 goals), discuss progress and changes. If the program is addressing more than two (2) goals, please duplicate this section. Please provide an action plan for each goal that gives the steps to completing the goal and the timeline.

1. **Program Goal:** Ensure student success at all levels in the classroom and lab activity.

List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal?

(Student Learning, Student Progression and Completion, Facilities, Leadership and Engagement)

Progress on goal achievement: The progress has been positive, and is ongoing.

Status Update – Action Plan and any link to Resource Requests: students have achieved success with the assessments of the SLO's and by changing teaching strategies.

2. **Program Goal:** Hire a full time Lab Technician class 1

List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal?

(1. Student Learning, 2. Student Progression and Completion, 3. Facilities, 4. Leadership and Engagement)

Progress on goal achievement: Under review

Status Update – Action Plan and link to Resource Requests: The Animal Science program and Plant Science program is in need of a lab tech 1. The addition to the program will enhance our labs and maintain our lab facilities for future students entering the programs.

B. List new or revised goals (if applicable)

Program Goal:

List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal?

(Student Learning, Student Progression and Completion, Facilities, Leadership and Engagement)

Progress on goal achievement:

Status Update – Action Plan and link to Resource Requests:

Program Analysis:

Take a look at your trend data (all programs should have some form of data that is used to look at changes over time). *All programs will answer the following questions unless otherwise indicated.*

1. Please report on any unexpected changes or challenges that your program encountered this cycle: **The biggest challenge is the lack of funding for a lab base CTE program.**
- A. How does your trend data (or other data your area collects) impact your decision making process for your program? **In the animal science program the retention rate for 2016-2017 is 93%. Our success rate is 77%. college wide retention is 88% and success is 71%.**
 - 2.
 3. Evidence of Department Dialog of data
 - If you have had time to review and discuss your program's data with members of your department, attach documentation of your discussion. Documentation can come in the form of minutes from meetings or retreats, email dialog or any other ways that show substantive discussion.
 4. Were there any changes to student demographics (age, gender, or ethnicity) for the past cycle?) **In the area of gender we have had a 1% increase in females from 79% in 2016b to 80% in 2018 and a 1% decrease in males from 21% in 2016 to 20% in 2017. The impacts of this change to the program can affect the numbers of males and females that continue to choose animal science as a major in the future. In the category of age for 19 and younger the animal science program went from 34% in 2016 t0 45% in 2017. This is a benchmark for the number of students coming directly out of high school. This can be a positive change for us as we continue to develop our outreach program and the needs of animal science skills in the industry. The only significant change in ethnicity we have experienced is with h hispanic population increasing 5% from 2016 to 2017. This change can provide challenges when identifying english language learners in animal science and finding new ways to meet their academic language barriers.**

5. Were there any changes to student success and retention rates for face-to-face and online courses? (instructional only) **No online distance courses offered at this time in animal science.**
6. Equity gaps
 - o Please look for large differences, or gaps, between top performing groups and others. Consider how you could identify the reasons behind these gaps, and if there changes that could be made to reduce them. For in depth review of equity issues, and on changes that are being made campus-wide, please refer to the current [Bakersfield College Student Equity Plan](#). **The Animal Science program has implemented new teaching strategies to increase success numbers. I have seen a increase in performance with students that have struggled in the past.**
7. Please describe any recent achievements of your department, including but not limited to faculty who have won awards or distinctions, new projects your department has implemented, professional development work, professional conference presentations or recently published work.
8. The college has embarked on significant efforts such as **Guided Pathways, affinity groups** and **completion coaching communities** to improve the success and completion rates of our students. Please describe what your program/department/office is doing to contribute to these efforts. The Animal Science Program is part of the Food science and nutrition path way.
9. Explain your role if you are involved in Dual Enrollment, Inmate Education, or Rural Initiatives. N/A

Analysis of Received Resources from Previous Cycle

Discuss the type of resources you received and their Impact on program effectiveness?

Facilities:

If your program received a building remodel or renovation, additional furniture or beyond routine maintenance, please explain how this request or requests impacts your program and helps contribute to student success.

- 1: Space Allocation
- 2: Renovation
- 3: Furniture
- 4: Other
- 5: Beyond Routine Maintenance

Technology:

If your program received technology (audio/visual – projectors, TV’s, document cameras) and computers, how does the technology impact your program and help contribute to student success?

- 1: Replacement Technology
- 2: New Technology
- 3: Software
- 4: Other _____

Other Equipment

If your program received equipment that is not considered audio/visual or computer equipment technology, please explain how these resources impact your program and help contribute to student success. The Animal Science has purchased equipment with Veta money last year to enhance our labs and engage the students. The impact of the additional equipment has been very positive and will increase success of students.

Conclusion:

Present any conclusions and findings about the program. This is an opportunity to provide a brief abstract or synopsis of your program's current circumstances and needs. Consider this a snapshot of your program if someone were to only read this portion of your annual program review.

In conclusion: the BC animal science program implements the study of animal science with cutting edge content and materials. The lack of cutting edge technology is a huge roadblock for the program. The lack of GU funding for a program that needs hands on labs, is an issue that has been address for the past few years with no evel. Animal science courses emphasize hands on learning with very strong teaching strategies. Lab work for the animal science student is highly valuable for a complete well rounded education.

The animal science program/ plant science program is also in need for a new full time lab tech 1. The addition of this position will affect student learning as labs will run more efficiently resulting in maximum student learning in the time allotted. Additionally faculty time and energy will be able to be focused more on student learning and less on lab prep and setup.

The animal science program is currently positioned to meet the goals of the district, college president, and the community, by increasing course completion, degree completion, transfer, and workforce ready. The program needs for funding, lab facilities, technology, and additional staff will increase the success of our students and accomplish the goals of the district, the college president, the animal science program, and the community for a better BC.

The Animal Science Job Outlook and Salary Data:

<u>Ag Sector</u>	<u>2015 Jobs</u>	<u>5 year New Jobs</u>	<u>% new Growth</u>	<u>Avg. Annual Salary</u>
<i>Support</i>	<i>500,088</i>	<i>46,522</i>	<i>9.3%</i>	<i>\$76,067</i>
<i>Production</i>	<i>382,833</i>	<i>720</i>	<i>0.2%</i>	<i>33,089</i>
<i>Processing</i>	<i>214,484</i>	<i>9,459</i>	<i>4.4%</i>	<i>\$58,717</i>
<i>Distribution</i>	<i>546,127</i>	<i>75,942</i>	<i>14%</i>	<i>\$46,645</i>
<i>Total</i>	<i>1,643,532</i>	<i>132,643</i>	<i>8.1%</i>	<i>\$53,630</i>

The data used is provided by California Community College:

The animal science program is composed of animal production for food, fiber, recreation, and companionship. The required skills and knowledge in a variety of areas including: diet, genetics habitat, anatomy, physiology, nutrition production, behavior, health, and welfare of large, small and specialty animals. Animal Science degrees develop skills in management and production to prepare students for work in animal nutrition, reproduction, health, marketing, meats, and other areas in the livestock industry. As explained throughout the APR, the need for equipment like large animal models, to be used for reproduction and anatomy, a ultra-sound machine for meat science, live animal herds like beef, and sheep, will give the student hands on skills. To teach beef or sheep production is difficult to do without live animal labs.

