

Bakersfield College

Comprehensive Program Review

Program Information:

Program Name: Animal Science
AS, AA, AST and CA

Program Type: xxx Instructional Student Affairs Administrative Service Other

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.**

Program Mission Statement: **The mission of the Bakersfield College Agriculture Department including The Animal Science program is to provide pertinent state-of-the-art education for vocational and transfer students in order to produce skilled agricultural and natural resource professionals for the industry, both public and private. This is in accordance with the college mission to respond to student and community needs with efficiency and flexibility and with the BC institutional level learning outcomes, i.e. to demonstrate knowledge and abilities in a chosen area of study**

Instructional Programs only:

A. List the degrees and Certificates of Achievement the program offers The Animal Science program offers AA, AS, AST and CA

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. The animal science program offers both because the AA in animal science is designed for students that wish to transfer to a four year school. The AS is designed for student to take less GE and more units in there major which will make them more employable after BC

C. If your program offers a local degree in addition to the ADT degree, please explain the rationale for offering both. The animal science program has been approved by the state to offer a AST pathway. The animal science program fills that by offering multiple pathways for students will increase student success.

Progress on Program Goals, Future Goals, and Action Plans:

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 goals, please duplicate this section.

Current Program Goals	Which institutional goals from the 2015-2018 Strategic Directions for Bakersfield College	Progress on goal achievement (choose one)	Comments
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	will be advanced upon completion of this goal? (select all that apply)		
1. Student success at all levels of the program.	<input checked="" type="checkbox"/> 1: Student Learning <input type="checkbox"/> xxx2: Student Progression and Completion <input type="checkbox"/> 3: Facilities <input type="checkbox"/> 4: Oversight and Accountability <input type="checkbox"/> xxx5: Leadership and Engagement	<input type="checkbox"/> Completed: _____ (Date) <input type="checkbox"/> Revised: _____ (Date) <input checked="" type="checkbox"/> Ongoing: 9/18/2017 _____ (Date)	
2. Review and revise degree, certificate, and course offerings as needed to balance workplace needs with student career success	<input type="checkbox"/> xx1: Student Learning <input type="checkbox"/> xx 2: Student Progression and Completion <input type="checkbox"/> 3: Facilities <input type="checkbox"/> xx 4: Oversight and Accountability <input type="checkbox"/> 5: Leadership and Engagement	<input type="checkbox"/> xxCompleted: 9/18/2017 _____ (Date) <input type="checkbox"/> Revised: _____ (Date) <input checked="" type="checkbox"/> Ongoing: 9/18/2017 _____ (Date)	

B. List the program's goals for the next three years. Ensure that stated goals are specific and measurable. State how each program goal supports the College's strategic goals. Each program must include an action plan.

Future Goals	Which institutional goals from the 2015-2018 Strategic Directions for Bakersfield College will be advanced upon completion of this goal? (select all that apply)	Action Plan	Timeline for Completion	Lead person for this goal
1. Acquire instructional supplies and materials needed to ensure viable and relevant instruction	<input type="checkbox"/> xx1: Student Learning <input type="checkbox"/> xx 2: Student Progression and Completion <input type="checkbox"/> 3: Facilities <input type="checkbox"/> 4: Oversight and Accountability <input type="checkbox"/> 5: Leadership and Engagement	Use the new funding from strong workforce	2017-2018	William Barnes
2. Introduce up to date technology in the new ag building.	<input type="checkbox"/> 1: Student Learning <input type="checkbox"/> 2: Student Progression and Completion <input type="checkbox"/> xx3: Facilities <input type="checkbox"/> 4: Oversight and Accountability <input type="checkbox"/> 5: Leadership and Engagement	Measure J	2017-2021	William Barnes

Best Practices:

Use real world applications relevant to the lesson plan.

Recruit industry professionals and utilize as guest speakers.

Keep students engaged with concentrated tests, not broad topic cumulative tests. (Not including final exams.)

Use of the early warning system.

Tutoring recommendations for those in need.

Hands-on learning activities include feeding, treating disease, grooming and proper handling of animals

The Animal Science staff main goal is to provide students with the necessary knowledge and technical skills to successfully enter the Industry, or to continue on to a four year degree.

Programs often do something particularly well; usually they have learned through assessment – sometimes trial and error – what solves a problem or makes their programs work so well. These are often called Best Practices and can help others. Please share the practices your program has found to be effective.



3 Year Program Analysis:

Take a look at your trend data. Provide an analysis of program data throughout the last three years (all programs should have some form of data that is used to look at changes over time) and report:

1. Changes in student demographics (gender, age and ethnicity). The animal science program has increased by 1% in the male category. In the age category of 20-29 we have increased by 1%. In the category of ethnicity we have increased by 1% in African American, a increase of 3% in Hispanic, a decrease of 1% in Asian/Filipino/Pac. Islander, a decrease in white by 2%
2. Changes in enrollment (headcount, sections, course enrollment, and productivity). Animal Science 2014 -190, 2015- 226, 2016- 401, 5 year average 241 students. Vet Tech. 2014-14 2015-58 2016-59, 5 year average 52. Active sections 2015-19 2016-23 2017-31. Enrollment- 2015-620, 2016- 774 2017- 813. Productivity: 2015- 19.1 2016- 23.4 2017- 19.0
3. Changes in achievement gap and disproportionate impact.
4. Success and retention for face-to-face as well as online/distance courses. Traditional: 2015 Retention 91% Success 73% 2016 Retention 93% Success 75% 2017 Retention 92% Success 81%. The data shows a increase in success rate in the last three years. I contribute this to the implementation of our assessment plans.
5. Any unplanned events that affected your program/.

6. Degrees and certificates awarded (three-year trend data for each degree and/or certificate awarded). AA 2014-0 2015- 3 2016-17- 5. AS- 2014-15- 2 2015-16- 7 2016-17- 8. Cert. animal science: 2014-15- 3 2015-16- 2 2016-17- 5. Vet Tech: 2014-15/6 2015-16/ 11 2016-17/ 13. In the animal science industry many of the high paying jobs require a BS degree in animal science, many of our students transfer to a four year school, but the data does not show the transfers.
7. Reflect on any changes you would like to see in your program in the next 3 years. [An increase in total awards especial Certs.](#)
8. List degrees and certificates awarded (three-year trend data for each degree and certificate awarded). Include targets (goal numbers) for the next three years.

Full Name of Degree or Certificate	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020	2020- 2021
Animal Science AA	3	5				
Veterinary Technician Cert.	11	13				
Animal Science AS	7	8				
Animal Science Cert.	2	5				

Resource Request and Analysis:

Resource Request		If Fulfilled, Discuss How Previous Year's Requests Impact Program Effectiveness?
Positions: <i>Discuss the impact new and/or replacement faculty and/or staff had on your program's effectiveness.</i>	<input type="checkbox"/> 1: Classified Staff <input type="checkbox"/> xx 2: Faculty	The Vet Tech program needed a full time Vet. The Ag dept. hired Dr. McEnroe to be the lead in our vet tech program so our students will be on a successful pathway to becoming certified by the state.
Professional Development: <i>Describe briefly, the effectiveness of the professional development your program has been engaged in (either providing or attending) during the last cycle</i>	<input type="checkbox"/> 1: Provided Professional Development <input type="checkbox"/> xx2: Attended Professional Development	The CATA conference at Cal Poly SLO gives all agriculture teachers in the state of California an opportunity to discuss cutting edge curriculum and to take the latest skill classes that will keep us as instructor's current with industry and increase student success at BC.

<p>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.</p>	<input type="checkbox"/> xx1: Space Allocation <input type="checkbox"/> xx2: Renovation <input type="checkbox"/> 3: Furniture <input type="checkbox"/> xx 4: Other <input type="checkbox"/> xx5: Beyond Routine Maintenance	<p>In 2014-2015 the Agriculture building went under extensive maintenance for updated repairs. Equipped with smartboards and new LCD projectors, this updated technology has helped instructors engage students in a more meaningful way. The use of technology has also enhanced planning for instructors as they are able to bring 21st century data to their lectures while also tapping into multimedia presentations that meet the needs of student instruction. The ag building is part of the Measure J bond for this coming year. The new ag building will offer students more instructional space along with state of the art technology for our students to succeed in the industry.</p>
<p>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?</p>	<input type="checkbox"/> 1: Replacement Technology <input type="checkbox"/> 2: New Technology <input type="checkbox"/> 3: Software <input type="checkbox"/> 4: Other _____	
<p>Resource Request</p>		<p>Discuss How Effective Request is for Student Success?</p>
<p>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.</p>	<input type="checkbox"/> 1: Replacement <input type="checkbox"/> xx2: New <input type="checkbox"/> 3: Other _____	<p>The animal science program purchased a ultra sound machine to be used in the reproduction classes and meat science. This advance technology will give our students hands on skills that our used in the livestock industry. The machine can also be used in the vet tech. program to teach the practical skill set used in vet hospitals.</p>
<p>Budget: Explain how your budget justifications will contribute to increased student success for your program. (Fiscal requests will be submitted by the</p>		<p>Sadly, the Animal Science program does not receive a budget allocation. Most of the funding we can secure come from VTEA and I hope workforce will be available for us. It is very difficult to maintain a high quality program especially a program like animal science, because of the lab component with the majority of our courses. We e not much different then biology, we just teach animal systems instead of human systems. I will tell you the largest major in all the ag disciplines is animal science; this includes the community colleges and the</p>

faculty chair and/or area administrator.)

four-year universities. The last 7 years I have requested a budget by filling out the required form, as of the start of this year the program remains budget less.

Conclusions & Snapshot:

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 Comprehensive Review. The Bakersfield College Animal Science program offers a strong classroom program. Where the program falls short is the lack of livestock facilities and livestock. Kern County is the largest agriculture county in the United States in the number 1 agricultural state. The agriculture industry is made up of many segments like Ag business, Crop science, Ag engineering, Horticulture; out of all the segments of the agriculture industry, animal science is the largest, 25% of the industry. As our program grows and the industry adopts newer technology, the animal science program will need to keep searching for the support and funding to stay current with the industry. I have requested a budget for animal science in the last 7 years, to date the program is still without an operating budget. I am not sure why the program does not receive funding from the district/BC. The program is a CTE program and these programs need monies for supplies like feed, medicines, and livestock. The labs are a key part of any science classe, because of the hands on opportunity component.