## Comprehensive Program Review Report



## **Program Review - Animal Science**

### **Program Summary**

#### 2022-2023

Prepared by: Allison Vander Plaats, Russell McKeith, Kim Pitigliano

What are the strengths of your area?: 1. Continued improvements to animal facilities and equipment. VTEA funding allowed us to purchase a "life size" beef skeleton that can be used in ASCI classes, as well as cameras to assist with parturition in the COS Sheep and Swine units (which has increased student safety & work-life balance of faculty members). Above Base funding allowed us to install new rubber flooring in the wash racks for the beef, equine and sheep units. Continued hard work from our Instructional Specialist Matt Prater has translated into improved grazing within our livestock & equine pastures.

2. The Veterinary Assisting Certificate has continued to gain traction, with many students currently pursuing certificates. This program is still geared towards preparing students for assistant roles in the veterinary practice by providing them with crucial background information and a set of basic laboratory and animal handling skills.

3. Coming out of COVID, students remain excited about Animal Science courses, and course enrollment and participation has remained high. All ASCI courses were taught as mainly face to face for the fall Fall 2021 and Spring 2022 semester. Students continue to be excited about being on campus & the opportunity to participate in labs face-to-face.

4. Annual review of animal health and handling protocols for our livestock units. Dr. Vander Plaats reviewed protocols put into place in 2019, updated them based on the needs of our units, & reorganized information so that it is more accessible to student workers. These protocols continue to be an excellent source of information for both students & faculty. Development of a more formal student training program via Canvas would be ideal, but it has proved difficult to organize information & make it required for student herdsmen who are not part of an official class. Instead, we have started videoing common procedures & will likely start by posting videos for review by students.

5. Annual review of livestock unit budgets. Dr. Vander Plaats collected all receipts & invoices from 2021-2022 & itemized everything to create an accurate reflection of how & where money was being spent. This budgeting helped guide budget modifications for 2022-2023, determine that certain items were miscoded, & provide the most accurate representation of money flow for the livestock units. Continued monitoring & monthly meetings with the dean have helped reduce waste spending, keep budget categories accurate, & plan for future years.

6. One of our newer classes, ASCI 126: Meat Science continues to increase in popularity. This class transfers to CSU's and UC with Animal Science Programs where this class equivalent is heavily impacted. Some of these students take our two other Food Safety Classes offered (AGMT 201 and ASCI 202). These classes expose students to the food safety and the food industry where jobs are plentiful here in the San Joaquin Valley.

7. With the help of our Animal Science Advisory, our DSCI classes are now cross-listed as ASCI classes. This has lead to increase enrollment for DSCI 101 for Fall 2022, as well as make it easier for students to enroll in DSCI classes.

8. In 2020-2021, we had 30 students complete an AS degree in Animal Science, AS-T in Animal Science, and a Certificate in Equine Science. This continues an upward trend established the last couple years as the most degrees awarded in Animal Science. Faculty enthusiasm about their subjects, student appreciation for hands-on learning, & better communication about how to earn degrees has contributed greatly to the growth of the ASCI program.

9. The Dairy Science program continues to gain student interest, mostly by overlap of students earning other degrees. The DSCI 104 (now ASCI 119) Breeding & Selection of Dairy Cattle course had 18 students enrolled in Spring 2022, who learned the theory behind cattle reproduction & breeding, & who were then able to apply that theoretical knowledge by visiting local dairies & palpating cows. DSCI 101 (now ASCI 118) Introduction to Dairy Science enrollment has held steady, primarily picking up students who have very little dairy knowledge or experience, with 25 students enrolled for Fall 2022, the highest enrollment since Dr. Vander Plaats has started teaching the course. With the modified certificate & more overlap in degree requirements across DSCI/ASCI/VT, we expect to see more completers within the next 2 years.

10. The Equine Program has remained with mostly full classes through the pandemic and students are happy to be face to face with all of their classes this fall. The Equestrian Team has been competing since Fall of 2021 and earned the Title of State Junior College Champions and had an over champion team member who represented COS at the national level in Spring of 2022. Last year, the Equine Unit was able to receive an arena conditioner, so that students may understand the importance of groomed ground to ride horses in, which is an industry standard practice.

11. Animal Science faculty and students continued with outreach activities, most of which were hybrid or virtual activities due to COVID, including FFA contests. This year, with more activities given the green light, we plan to include students in the World Ag Expo & local fairs, along with more FFA Speaking and Judging Contests.

12. ASCI student has remained steady during COVID. For 2019-2020, ASCI student enrollment was 255 and was 240 for 2020-2021. I think this is due to the fact that we continued to offer most classes in a Face-to-Face modality because we understand the importance of "hands-on" education.

What improvements are needed?: 1. We have an ASCI faculty member leaving at the end of the Fall 2022 semester. This will leave a huge void in our ASCI Program due to their significant contributions to the program. It is necessary to hire a replacement this academic year because our program continues to grow and warrants a third ASCI faculty member in the Agriculture Division. With everything the ASCI Department does, it is extremely difficult to successfully complete all of the classroom, non-classroom (extra-curricular), and livestock unit responsibilities. We currently have adjuncts to teach classes typically taught in the spring, so we can have students complete their certificates and degrees, but will need a full time faculty member for Fall 2023.

2. A replacement 3/4 ton 4 Door 4WD Truck with the ability to pull gooseneck trailers. The ASCI department had one get totaled in an accident this past spring on the way to a Collegiate Livestock Show. Currently, there are two 3/4 AG trucks available to pull goosenecks, but more than two are necessary many times because of the different events AG students and faculty participate in simultaneously. A third 3/4 ton truck would reduce the burden when we need them for these overlapping activities. Activites include: IHSA Horse Shows, Collegiate Livestock Shows, Hauling Horses and Livestock to vet or sale barn, and delivering sale project animals to HS FFA Programs and 4-H Chapters.

3. Continuing education for faculty remains important to keep faculty up to date with new information, technologies, and industry trends. Due to COVID, more & more professional development is taking place virtually, which allows for distribution of information without the requirement of travel, which faculty members have taken advantage of.

4. Continued improvement of cross-unit equipment. Instructional Specialist Matt Prater has been able to manage pastures & arenas with existing equipment, though he could be significantly more efficient with more appropriate tools. Purchase of a manure spreader would allow more efficient utilization of his time, better pasture performance, & the added benefit of use at the Ornamental Horticulture & Plant Science units as well.

5. Continued student training programs for livestock unit protocols and improved student experience. The Canvas has been set up, & an outline of topics to be covered has been added. We have started videoing common procedures, taking pictures of procedures, supplies, & areas of each unit, & incorporating those into training videos that can be accessed by students at any time. In addition, the requirement to work through these modules, plus volunteering at the livestock units, will be implemented for any students interested in becoming student herdsmen. Currently students are hired as herdsmen only after they've completed Work Experience and have knowledge of how our units run, but development & implementation of a more formal training program would improve consistency in student experiences and knowledge, which will translate to improved animal handling, sick animal identification and treatment.

6. Addition of a second Animal Science Technician (Part Time). As the Animal Science program continues to grow, a part time second technician is necessary for enhanced lab safety and setup efficiency, help with animal breeding programs and birthing assistance for all species, support with facility projects (fence repair, pasture management), and equipment maintenance (tractors, Gator).

7. ASCI 130 Enrollment in ASCI 130 is up for the Fall 2022 semester. ASCI 130 Equine Evaluation has been an elective course for both the ASCI Certificate of Achievement and Associates degree, so that students can choose to take either Equine Evaluation or Livestock Evaluation (ASCI 002). Advertisement of this course as an alternative elective course has helped increase enrollment. This class can also be put in front of the GE committee with some curriculum changes, which would help enrollment.

8. Continue to have better communication with counselors regarding open courses, available certificates, & career paths related to each certificate. Because we have a variety of animal-related certificates falling within ASCI & VT, plus the addition or modification of existing certificates, counselors understandably are directing students to courses or certificates that don't necessarily match up with each student's career goals. Better communication about what each certificate's goals are, which courses are required, & overlap between courses in similar areas is essential to increase student enrollment, increase certificate completers, & increase overall student satisfaction with their education & career.

9. Improved student metrics and demographics. It is still difficult to determine which students in our ASCI/DSCI/VT courses are tracking for which certificate or degree. Ideally, we would have a list of students for each degree or certificate to build better relationships with them & assist them with getting courses they need for completion of certificates & degrees or for achieving whatever career goals they have in mind.

10. Student safety at night is important for the COS Livestock Units. Currently, lack of lighting makes it dangerous for students to work with livestock/horses at night. Better lighting is necessary to mitigate potential accidents for students and faculty working with livestock/horses at night.

11. Power/Electricity at the cattle working facilities at the COS Livestock Units. It would be very helpful to not be dependent on a generator to perform certain livestock techniques. Additionally, lighting would make it safer to conduct this techniques at night if necessary.

12. Animal Science Course Success for 2021-2022 was 73.5% for overall ASCI course completion rate in Fall 2021 and 80.47% for Spring 2022. Additionally, Distance Education was 71.9% for Fall 2021 and Face-to-Face was 76% for Fall 2021 and 80.43% course completion ration for ASCI classes for Spring 2022. In all of these categories, COS ASCI classes were below the state course completion rate for 2021-2022 academic year. This could be attributed to students dropping classes or decide not to attend classes anymore and take a non-passing grade for the course. This is something I think will improve as we are moving out of COVID restrictions and offering almost all Face-to-Face ASCI classes.

13. An 8 foot flail mower is needed in all of the livestock and other agriculture units. The mower can be used to teach students about pasture management, and how important it is since water is becoming scarce and to also understand the removal of toxic grasses. The mower will also be used by our farm technician to remove inedible weeds, and tall grasses that can cause toxicity in livestock.

**Describe any external opportunities or challenges.:** 1. Continued support of local producers of horses, sheep, swine, and cattle to form the basis of our breeding herds. Last year, we purchased 5 lambs from Fresno State to add more genetic diversity to our herd.

2. Intercollegiate Horse Show Association (IHSA) horse shows and community equine events to showcase our students and facilities.

3. FFA Field Days and other activities to showcase our facilities and make connections with local 4H/FFA chapters, both students and faculty alike.

4. Sale of COS livestock to local 4H/FFA members to showcase our genetics and present COS as a high quality college experience. Despite the lack of fairs & shows, livestock sales held strong at approximately \$27,000. Livestock sales have continued to increase over the past few years.

5. Continued student participation in high level internships like the Kentucky Equine Management Internship, Seaboard Foods, and more.

6. Continued participation of student clubs in COS Harvest Fest to showcase our students, facilities, and programs to prospective students and the community.

7. The COS Equestrian Team was able to participate in person for the Fall 2021 and Spring 2022 season. We are one of the few community colleges in CA participating in Equestrian Events. The team introduces Non-Agriculture students to become students in Agriculture, while it additionally allows students majoring in Agriculture to be athletes for COS. Due to being able to meet in person we had two athletes make Semi-Finals in Illinois, and one athlete make the National Finals in Pennsylvania. We are practicing and continuing to complete in Fall 2022.

8. Students have been very successful competing in the Collegiate Livestock Shows this past year through participation in ASCI 224: Livestock Merchandising.

**Overall SLO Achievement:** SLO's for all animal science classes were above the state average measurement for student success for course success. For Spring 2022, COS students had a student success rate of 80.43%% compared to the state average of 79.4%. On the contrary, COS students had a student success rate of 73.5% in Fall 2021 compared to the state average gf 78.6%. The fall percentage could be lower because we were still offering many ASCI classes in a online or hybrid modality due to COVID. We believe they were substantially higher for the Spring 2022 semester because almost all ASCI classes were offered in a face-to-face modality. As stated previously, we had 30 students complete ASCI degrees and certificates this last year.

**Changes Based on SLO Achievement:** Due to our substantial improvements in student success, our current SLO's seem to be working appropriately. We have made changes the past couple of years, which has helped us increase our student success percentages. Additionally, the data supports that our students learn/comprehend information better in a face-to-face modality. This type of instruction is critical for CTE based programs.

**Overall PLO Achievement:** There were 244 unduplicated students enrolled in ASCI classes for the 2021-2022 academic year. We had 27 students awarded Animal Science Degrees (AS and AS-T) and 3 students receiving Equine Science Certificates.

**Changes Based on PLO Achievement:** As a department we need to continue to emphasize completion rates for degrees and certificates. This can be achieved by offering more sections of Animal Science classes, as well as continuing to encourage students to complete their certificates and degrees. Additionally, to keep up the success of ASCI completion rates and ASCI course offerings it is pertinent that a replacement ASCI faculty member be hired for the 2023-2024 Academic year. Also, an additional technician would be able to assist with more laboratory classes being offered, which would hopefully increase student success.

**Outcome cycle evaluation:** The animal science department has assessed courses and reviewed assessment as listed in Trackdat for Fall 2021 and Spring 2022. The courses that still need to be evaluated in Trackdat are ASCI 104, ASCI 123, ASCI 126, ASCI 130, ASCI 140 and ASCI 141.

# Action: 2022-2023 Objective #1: Maintain efficiency and increase/maintain level of course offerings to ensure program completions and transfer.

Maintain efficiency of our Animal Science program and maintain/grow course offerings and have excellent maintained laboratory facilities AND ensure continued growth of our certificate completers, degrees completers and transfers.

Leave Blank:

Implementation Timeline: 2022 - 2023 Leave Blank: Leave Blank:

**Identify related course/program outcomes:** Animal Science Program Outcome #1: Demonstrate knowledge, practical skills and abilities in animal health and welfare, housing and environment, food products, genetics, nutrition, and reproduction to successfully work in the food animal industry.

Animal Science Program Outcome #2: Identify and operate equipment and technology commonly used in the food animal industry.

Animal Science Program Outcome #3: Communicate professionally both in oral and written formats demonstrating sound knowledge of the food animal industry in that communication.

Animal Science Program Outcome #4: Describe and develop the necessary skills and requirements for pursuing careers in the food animal industry.

Person(s) Responsible (Name and Position): Kim Pitigliano and Russell McKeith

**Rationale (With supporting data):** Since Dr. Vander Plaats arrival 4 years ago, we have increased our offering of Animal Science courses and all of those enrollments have increased. We went from low enrolled dairy science courses to courses with waitlists. We also have revised our veterinary program to have a Vet Assisting program that is at full-capacity with waiting lists. Dr. Vander Plaats also provided an additional section of Animal Science. Additionally, the need for a faculty member to share the burden of the Livestock Units is crucial to having the best labs for our students. To maintain efficiency of our Animal Science program and maintain/grow course offerings and have excellent maintained laboratory facilities, we desire the approval to hire an Animal Science Faculty member to replace Dr. Allison Vander Plaats who is leaving at the end of Fall 2022 semester. To maintain our Animal Science course offerings, degrees and certificates it is paramount to have get a replacement full time professor.

Priority: High Safety Issue: No External Mandate: No

#### Safety/Mandate Explanation:

#### Resources Description

**Personnel - Faculty -** Replacement Full Time Animal Science Professor for the Agriculture Division (Active)

Why is this resource required for this action?: To maintain current FTES, certificate and program completes, and offering the variety of ASCI courses in the Agriculture Division each semester. Additionally, the COS Livestock Units have significantly grown in numbers and co-managing the units helps increase overall efficiency. To maintain our Animal Science course offerings, degrees and certificates it is paramount to have get a replacement full time professor. Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 150000

#### Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 1.1 - The District will increase FTES by 1.75% over the three years

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objective 2.2 - Increase the number of students who transfer to a four-year institution by 10 percent over three years

**District Objective 2.4** - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objective 4.1 - Increase the use of data for decision-making at the District and department/unit level

**District Objective 4.3** - College of the Sequoias Board of Trustees, administration, faculty, and staff will engage in best practices and staff development to sustain effective operational systems for institutional assessment and continuous improvement.

## Action: 2022-2023 Objective #2: Maintain and expand all laboratory activities, specifically Animal Science and Athletics

Maintain and expand all laboratory activities for all Ag Division departments, including Animal Science and Athletics through replacement of a 3/4 ton 4 Door 4WD Truck with the ability to pull gooseneck trailers for the Agriculture Division activities.

#### Leave Blank:

Implementation Timeline: 2022 - 2023

Leave Blank:

#### Leave Blank:

**Identify related course/program outcomes:** ASCI 001 Outcome #1: Upon completion of this course students will be able to restrain, move and safely monitor livestock from pen to trailer.

ASCI 140 Outcome #2: Given safety expectations and consequences, students will be able to analyze and apply techniques and practices to proper safe animal handling.

ASCI 141 Outcome #3: Safe animal handling for horses Analyze techniques and practice safe animal handling for horses with varying temperaments.

Person(s) Responsible (Name and Position): Kim Pitigliano and Russell McKeith

**Rationale (With supporting data):** The ASCI department uses 3/4 ton 4WD pickup for multiple functions. On almost a weekly basis, animals are transported for classes and/or activities, including routine health/maintenance visits to local veterinarians. The truck is used to haul hay, pick-up feed as well as other activities such as Collegiate Livestock Shows, Horse Club activities and delivering sale project animals to HS FFA Programs and 4-H Chapters.

Please note, even though this is an Animal Science request, the truck is not only used for the Animal Science Department but is also used by Athletics Department to transport horses to ISHA Equestrian Shows around the state.

Priority: High Safety Issue: No External Mandate: No Safety/Mandate Explanation:

**Equipment - Instructional -** Replacement 4 Door 4WD Truck capable of pulling gooseneck trailers for the Agriculture Division. (Active)

Why is this resource required for this action?: The ASCI department uses 3/4 ton 4WD pickup for multiple functions. On almost a weekly basis, animals are transported for classes and/or activities, including routine health/maintenance visits to local veterinarians. The truck is used to haul hay, pick-up feed as well as other activities such as Collegiate Livestock Shows, Horse Club activities and delivering sale project animals to HS FFA Programs and 4-H Chapters. This will will allow all AG Faculty and Students to participate in multiple events needing livestock on the same weekend. This will will allow all AG Faculty and Students to participate in multiple events needing livestock on the same weekend.

Please note, even though this is an Animal Science request, the truck is not only used for the Animal Science Department but is also used by Athletics Department to transport horses to ISHA Equestrian Shows around the state. **Notes (optional):** 

Cost of Request (Nothing will be funded over the amount listed.): 80000

#### Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 2.4** - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objective 4.1 - Increase the use of data for decision-making at the District and department/unit level

**District Objective 4.3** - College of the Sequoias Board of Trustees, administration, faculty, and staff will engage in best practices and staff development to sustain effective operational systems for institutional assessment and continuous improvement.

## Action: 2022-2023 Objective #3: Maintain laboratory facilities, specifically pastures

As pasture management is required to maintain the learning objectives for multiple classes, the ASCI department is requesting an 8 foot Flail Mower.

Leave Blank: Implementation Timeline: 2022 - 2023 Leave Blank: Leave Blank: Identify related course/program outcomes: ASCI 104#6 Upon completion of this course students will be able to explain and develop a practical sanitation program for a livestock facility.

Person(s) Responsible (Name and Position): Kim Pitigliano

**Rationale (With supporting data):** Pasture/range management is a fundamental skill and part of the learning objectives for multiple classes. This mower is needed for pasture management in several classes and will be used by our farm technician to mow toxic weeds and maintain the grasses through multiple seasons. Maintenance of pastures provides better quality nutrients for the animals and requires less water used during irrigation. These are all sound principles taught throughout our courses.

Priority: High Safety Issue: No External Mandate: No Safety/Mandate Explanation:

#### **Resources Description**

Equipment - Instructional - 8 foot Flail Mower (Active)

Why is this resource required for this action?: As pasture management is required to maintain the learning objectives for multiple classes, the ASCI department is requesting an 8foot Flail Mower.

Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 8000

#### Related Documents:

8footflailmower.pdf

#### Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

**District Objective 2.4** - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

**District Objective 4.3** - College of the Sequoias Board of Trustees, administration, faculty, and staff will engage in best practices and staff development to sustain effective operational systems for institutional assessment and continuous improvement.

## Action: 2022-2023: 2021-2022 Objective #4: Improved student learning and retention

Students learn through multiple senses. Using a physical model to demonstrate the retail and wholesale cuts from a beef carcass, student learning will improve.

#### Leave Blank:

Implementation Timeline: 2021 - 2022, 2022 - 2023 Leave Blank: Leave Blank: Identify related course/program outcomes: ASCI 126: Meat Science SLO #3 - The student will demonstrate safe and sanitary techniques for processing beef, sheep and pork carcasses into wholesale cuts and retail products. Person(s) Responsible (Name and Position): Russell McKeith Rationale (With supporting data): Priority: High

Safety Issue: No External Mandate: No Safety/Mandate Explanation:

#### **Update on Action**

#### Updates

 Update Year: 2021-2022
 08/22/2022

 Status: Continue Action Next Year
 08/22/2022

 Would still be beneficial for educational purposes this year. We did not receive funding for it in either VTEA or Above Base.
 Impact on District Objectives/Unit Outcomes (Not Required):

#### Resources Description

Equipment - Instructional - Beef Carcass Model (Active)

Why is this resource required for this action?: To show students where certain wholesale and retail cuts come from on a beef carcass. They will better understand where these different meat products come from. Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 5000

#### Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 1.1 - The District will increase FTES by 1.75% over the three years

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objective 4.1 - Increase the use of data for decision-making at the District and department/unit level

District Objective 4.3 - College of the Sequoias Board of Trustees, administration, faculty, and staff will engage in best practices and staff development to sustain effective operational systems for institutional assessment and continuous improvement.

## Action: 2021-2022 Purchase manure spreader for pasture & crop management

Instructional specialist Matt Prater has done an excellent job with pasture management, but is currently very inefficient as he is using equipment we currently own but is not ideal. Purchase of a 140 cubic foot manure spreader would allow better pasture management, arena management, & could be used at the OH and PLSI units.

#### Leave Blank:

Implementation Timeline: 2021 - 2022 Leave Blank: Leave Blank: Identify related course/program outcomes: ASCI 103: Feeds and Feeding SLO #2 - Given a livestock feeding scenario, students will be able to to identify appropriate feedstuffs foraccomplishing necessary product outputs, to a level that is industry standard and approved.

Person(s) Responsible (Name and Position): Matt Prater Rationale (With supporting data): Priority: High Safety Issue: No External Mandate: No Safety/Mandate Explanation:

#### Update on Action

#### Updates

Update Year: 2021-2022 Status: Action Completed Purchased during the 2021-2022 Academic year and being utilized at the AG Instructional Units. It has been very helpful in utilizing the compost that is created from animal waste.

Impact on District Objectives/Unit Outcomes (Not Required):

#### Resources Description

Equipment - Instructional - 140 cubic ft. powdered coasted standard manure spreader with PTO drive. (Active) Why is this resource required for this action?: The manure that is being composted currently could then be spread on the pastures, SAgE Farm, and pumpkin patch to increase soil health and longevity. Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 11000

#### Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5

08/22/2022

percentage points

District Objective 4.1 - Increase the use of data for decision-making at the District and department/unit level

**District Objective 4.3** - College of the Sequoias Board of Trustees, administration, faculty, and staff will engage in best practices and staff development to sustain effective operational systems for institutional assessment and continuous improvement.

## Action: 2021-2022 Lights for COS Pastures/Alleys

For student and faculty safety, it is pertinent to have lights installed for the pastures/alleys when livestock/horses are being worked with and checked on when it is dark outside.

Leave Blank: Implementation Timeline: 2021 - 2022 Leave Blank: Leave Blank: Identify related course/program outcomes: Person(s) Responsible (Name and Position): Russell McKeith, Kim Pitigliano, Allison Vander Plaats - Animal Science Faculty Rationale (With supporting data): Priority: High Safety Issue: Yes External Mandate: No Safety/Mandate Explanation:

#### **Update on Action**

#### Updates

**Update Year:** 2021-2022

08/22/2022

Status: Continue Action Next Year

Funding has not been found yet for this project. This project is still very important for animal and human safety especially during night classes.

Impact on District Objectives/Unit Outcomes (Not Required):

#### Resources Description

**Equipment - Non-Instructional -** Proper lighting to work with and monitor livestock in the pastures/alley ways/livestock handling facilities when it is dark/minimal light outside. (Active)

Why is this resource required for this action?: Students checking/gathering livestock and equines at night are currently doing it with minimal/no light. Livestock could pose a safety threat to students and faculty. Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 80000

#### Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

**District Objective 2.4** - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

**District Objective 4.1** - Increase the use of data for decision-making at the District and department/unit level

**District Objective 4.3** - College of the Sequoias Board of Trustees, administration, faculty, and staff will engage in best practices and staff development to sustain effective operational systems for institutional assessment and continuous improvement.

## Action: 2021-2022 Student Safety

Spray lining for all wash racks is needed for student and livestock safety and proper handling of livestock.

#### Leave Blank:

Implementation Timeline: 2019 - 2020, 2021 - 2022 Leave Blank: 08/17/2015

Leave Blank: 06/30/2019

**Identify related course/program outcomes:** ASCI 140 #2: Given examples of appropriate physical posturing and guided practice of balance and mounting, students will be able to apply the concepts of posture and proper balance while mounted on their horse. They will also demonstrate different types of reining, including one and two handed techniques while relating leg aides to the horses gait. Equine industry standards shall be applied to competency in this area. ASCI 140 #3

Given appropriate modeling of leg aides and movements, students will be able to identify various leg aides that complement the different gaits of the horse. They will also observe and practice proper leads of the horse. Equine industry standards shall be applied to the competency in this area.

ASCI 001 #1 Upon completion of this course students will be able to restrain, move and safely monitor livestock from pen to trailer.

(Active)

Person(s) Responsible (Name and Position): Kim Pitigliano

**Rationale (With supporting data):** 1. Non slip flooring is needed for the safety of students and livestock while hauling and bathing animals.

Priority: High Safety Issue: Yes External Mandate: No Safety/Mandate Explanation: Students and/or livestock could get hurt if not put in at the COS Livestock Units.

#### **Update on Action**

#### Updates

Update Year: 2021-2022 Status: Action Completed 08/22/2022

This was completed during the Summer 2022 with Above Base Funds. It has made it easier and safer to wash animals in the wash racks thus far.

Impact on District Objectives/Unit Outcomes (Not Required):

#### Resources Description

Equipment - Instructional - Permanent Ruber liners for the beef, equine and sheep wash racks (Active)

Why is this resource required for this action?: To help with livestock and human safety. Currently, our rubber mats in our wash rack are deteriorating so they need to be replaced for safety reasons Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 20000

#### Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 1.1 - The District will increase FTES by 1.75% over the three years

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

**District Objective 2.2** - Increase the number of students who transfer to a four-year institution by 10 percent over three years

District Objective 4.1 - Increase the use of data for decision-making at the District and department/unit level

District Objective 4.3 - College of the Sequoias Board of Trustees, administration, faculty, and staff will engage in best practices

and staff development to sustain effective operational systems for institutional assessment and continuous improvement.

District Objectives: 2015-2018

District Objectives - 1.1 - Increase overall enrollment by 1.75% annually

**District Objectives -** 2.1 - Increase the number of students who are transfer-prepared annually.

**District Objectives -** 2.3 - Increase course success and completion rates in pre-transfer English, Math, and English as a Second Language courses annually.

## Action: 2018-2019 Increased Continuing education for Faculty

Continuing Education for faculty to learn up-to-date animal science reproduction skills and other current industry skills to instruct students on the most current industry standards.

Leave Blank: Continued Action

Implementation Timeline: 2019 - 2020, 2021 - 2022

Leave Blank: 09/01/2017

Leave Blank: 05/31/2019

Identify related course/program outcomes: ASCI 123 Horse Production:

Course Outcome

1. Given a bred mare or reproductive scenario, students will be able to demonstrate understanding proper equine care from gestation through foaling. This will include applying record management to equine health decisions. The student will be evaluated in this area by demonstrating his/her problem solving ability with a production scenario problem to include health and reproduction. The student must consider all possible management decisions to classify the problem. ASCI 110 Swine Production:

Course Outcome:

1. Upon completion of this course, students will be able to list and define accepted practices for selecting and maintaining a breeding herd of swine.

ASCI 111 Beef Production:

Course Outcome:

1. Upon completion of this course, students will be able to explain and demonstrate basic breeding, selection practices for beef cattle.

ASCI 112 Sheep Production:

Course Outcome:

1. Upon completion of this class, students will be able to describe and implement a breeding program for the production of lambs.

#### Person(s) Responsible (Name and Position): Kim Pitigliano and Russell McKeith - Animal Science Faculty

**Rationale (With supporting data):** Proper training for current knowledge regarding standard industry reproduction techniques is essential to give students proper training to prepare them for employment in the equine/livestock industry. New animal science facilities in Tulare offer the opportunity for students to have hands-on education utilizing the most current and novel methodology. The Animal Science and Equine advisory committees strongly recommend staying on the cutting edge with modern reproduction techniques, and believe it is essential in utilizing these facilities to their best educational advantage. **Priority:** High

Safety Issue: Yes External Mandate: No Safety/Mandate Explanation:

#### **Update on Action**

#### Updates

Update Year: 2021-2022 Status: Continue Action Next Year It is important for faculty to stay current on all necessary industry skills in animal science. Impact on District Objectives/Unit Outcomes (Not Required): 09/28/2021

**Technology** - Funding for classes. Classes that are needed for current industry practices include: Artifical insemination procedures (including deep horn insemination), embryo transfer, frozen and cooled semen, as well as proper bull, ram, boar and stallion handling. (Active)

Why is this resource required for this action?: Funding is required because industry training is offered via private companies and training entities.

Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 2500

#### Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 1.1 - The District will increase FTES by 1.75% over the three years

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objective 2.2 - Increase the number of students who transfer to a four-year institution by 10 percent over three years

District Objective 4.1 - Increase the use of data for decision-making at the District and department/unit level

**District Objective 4.3** - College of the Sequoias Board of Trustees, administration, faculty, and staff will engage in best practices and staff development to sustain effective operational systems for institutional assessment and continuous improvement.

District Objectives: 2013-2015

**2013-2015:** District Objective #7 - District Objective #7 for 2013 - 2015: Allocate resources based on an accountable and systematic District-wide planning and budget development process that links this allocation to Institutional Program Reviews and the Strategic Plan.

District Objectives: 2015-2018

District Objectives - 1.1 - Increase overall enrollment by 1.75% annually

District Objectives - 2.1 - Increase the number of students who are transfer-prepared annually.

District Objectives - 2.2 - Increase the number of students who earn an associate degree or certificate annually.

District Objectives - 2.4 - Increase Career Technical Education course success rates and program completion annually.

**District Objectives -** 3.2 - Increase training for academic and student services staff and faculty to respond to the unique needs of our student population.