

**Wayne Community College
Program Review and Outcome Assessments, 2018-19**

Institutional Goal 2: Ensure Program Excellence

Institutional Goal 3: Improve Student Success

Department Name: Applied Animal Science Technology

Mission/Purpose: The purpose of the Applied Animal Science Technology Program is to provide students with the skills necessary for animal husbandry and welfare using essential scientific principles.

Degrees, Diplomas, and Certificates Offered: AAS degree (A15280) and Certificate (C15280) in Applied Animal Science.

Describe how the program's mission aligns with the College's vision, mission, core values, and strategic goals.

The Applied Animal Science program strives to be the preferred choice for training in the field of animal husbandry and animal welfare. The program provides the essential training in the principles of animal science. Instructors are in constant communication with students and show compassion toward students. Students are taught valuable leadership skills through lab settings and are encouraged to attend community events such as the Wayne County Chamber of Commerce Hot Topics in Agriculture as well as the Farm City Week Banquet. Students are encouraged to work together and learn from each other's diverse skills. Through consultation with the program Advisory Committee, program instruction meets the needs of employers in the area of animal science. Expected outcomes include a well-versed student who will be a top candidate for job placement or a qualified transfer to a baccalaureate program at colleges and universities that have signed articulation agreements.

Activities to ensure curriculum currency (2015-16; 2016-17; 2017-18)

List program curriculum changes, revisions, deletions in table.

Course Title	Date – Updated / Revised / Deleted
ANS 160 - Animal Waste Management	Fall 2017 Deleted
ACM 111 - Healthcare for Animals	Fall 2017 From optional to required
ANS 170 - Sheep & Goat Production	Fall 2017 From optional to required
ANS 230 - Poultry Management	Fall 2017 From Spring to Summer

Provide an overview of the significance of the program changes and improvements that occurred over the past three years

As a result of consultation with the advisory committee and the development of the new Swine Management Technology program, ANS 160 was deleted from the curriculum. This course is a swine industry specific course and is better suited to be covered in ANS 144 - Swine Housing and Waste Management within the Swine Management curriculum. As a result, ACM 111 and ANS 170 went from being optional to required to give students a broader scope of understanding of different species within the animal science curriculum. ANS 230 was moved to the summer semester to replace ANS 160 in the summer and give students a typical course load of 16-17 hours per semester.

Advisory Committee: dates, summary of minutes, activities (2015-16; 2016-17; 2017-18)**Summary of Advisory Committee Activities**

Year	Meeting Dates	Recommendations / Activities
2015-16	10/14/15 & 4/8/16	Change of program learning outcomes and Rosewood High School ANS Academy/Program Review
2016-17	10/28/16 & 4/7/17	Rosewood ANS Academy and Curriculum Changes/Swine Management Program and Planning Objectives
2017-18	11/17/17 & 4/27/18	ANS Space needed, Career Exploration Camps, articulation agreements/Swine Management Program implementation and US Poultry Federation Grant funding

Describe program's participation with Advisory Committee or external organizations that contribute to maintaining program relevance. *(File Advisory Committee Meeting Minutes for past three years in Program Review Attachment folder.)*

The Applied Animal Science Advisory Committee has been instrumental in helping keep the program up to date and relevant in today's economic climate. The committee has supported the needs associated with the planning objectives and recruiting events. The committee has supported and provided input into the curriculum changes within the animal science program as well as helped in the process to implement the swine management technology program. Also, as a part of the Wayne County Chamber of Commerce, faculty and students have been able to participate in activities like Ag Hot Topics and Farm City Week Banquet where students are able to interact and network with others in the agricultural community in Wayne County.

Analysis of trends in the field or industry

Provide narrative for analysis of trends in the field. *(Are there jobs available for your students? Is there new technology/equipment that needs to be added to your program?)*

The swine industry in eastern North Carolina began to grow in the 1980's. As the industry grew, jobs were created in management positions. These positions were filled by graduates of animal science (livestock and poultry) programs. In the late 90's, the swine industry faced a moratorium which means that no new facilities can be built in North Carolina. The swine industry is a booming business with growth potential outside of North Carolina, however, jobs are abundant and will become more abundant in years to come as those who began employment in the 80s will begin to retire and those positions will need to be filled by graduates with an animal science/swine management degree.

The poultry industry in eastern North Carolina is a growing field. There is no moratorium on poultry like swine and positions continue to be created as well as those needing to be filled by those retiring from the field. Agriculture accounts for 20% of Wayne County's employment and over \$800 million to the economy. The livestock and poultry industry accounts for 66% of the agriculture in Wayne County.

There is always new technology and equipment that can be added, however, the biggest need for the program to continue to grow and be successful is access to animals on campus for more hands on lab exercises.

References

<http://www.waynealliance.org/Data-Demographics/Report-Builder.aspx>

Faculty Profile**List of Faculty and Status (2015-16; 2016-17; 2017-18)**

Faculty / Name	Full-Time / Part-Time
Sherry Sauls	Part Time
Jennifer Johnson	Full Time

Have all the faculty credentials been verified? (*Verify required documents are in personnel files.*)

All faculty credentials have been verified with Janet Sumner on 2/25/19.

Faculty Contact and Credit Hours

Faculty / Name	Full-Time Part-Time	Summer 2015		Fall 2015		Spring 2016	
		Contact	Credit	Contact	Credit	Contact	Credit
Jennifer Johnson	Full Time	12	14	22	20	36	31
Sherry Sauls	Part Time	0	0	11	9	7	6

Faculty / Name	Full-Time Part-Time	Summer 2016		Fall 2016		Spring 2017	
		Contact	Credit	Contact	Credit	Contact	Credit
Jennifer Johnson	Full Time	12	14	38	32	34	31

Faculty / Name	Full-Time Part-Time	Summer 2017		Fall 2017		Spring 2018	
		Contact	Credit	Contact	Credit	Contact	Credit
Jennifer Johnson	Full Time	12	14	41	35	37	31

Faculty Demographics (2015-16; 2016-17; 2017-18)

	# Employees	Avg. Years of Service	% of Classes Taught By
Full-Time	1	13	80%
Part-Time	1	2	20%

Provide narrative for adequacy of faculty numbers. (*Do you have enough faculty to support your program?*)

As numbers continue to grow, we will need to add faculty to support the program. I would like to see 15-20 students in each section before adding faculty to the program in order to ensure stability.

Professional development activities of faculty (2015-16; 2016-17; 2017-18)

Verify departmental professional development (PD) tracking logs are completed and filed in Program Review Professional Development folder.

Professional development has been tracked, reviewed and verified for Jennifer Johnson (2015-18) and Sherry Sauls (2015-16)

Student Demographics

Gender (A15280) Unduplicated			
Academic Year	Female	Male	Total
2015-2016	33	12	45
2016-2017	34	11	45
2017-2018	41	16	57

Gender (C15280) Unduplicated			
Academic Year	Female	Male	Total
2015-2016	14	6	20
2016-2017	4	1	5
2017-2018	3	3	6

Ethnicity (A15280) Unduplicated							
Academic Year	American Indian	African American	Asian or Pacific Islander	Hispanic	Caucasian	Other / Unknown / Multiple	Total
2015-2016	1	5	1	2	35	1	45
2016-2017	1	3	0	5	36	0	45
2017-2018	2	4	1	8	42	0	57

Ethnicity (C15280) Unduplicated							
Academic Year	American Indian	African American	Asian or Pacific Islander	Hispanic	Caucasian	Other / Unknown / Multiple	Total
2015-2016	0	2	0	2	15	1	20
2016-2017	0	1	0	1	3	0	5
2017-2018	0	0	0	1	5	0	6

Age Groups (A15280) Unduplicated						
Academic Year	Under 18	18-24 years	25-34 years	35-44 years	45 and older	Total
2015-2016	0	32	6	5	2	45
2016-2017	0	34	7	4	0	45
2017-2018	0	42	9	3	3	57

Age Groups (C15280) Unduplicated						
Academic Year	Under 18	18-24 years	25-34 years	35-44 years	45 and older	Total
2015-2016	10	9	1	0	0	20
2016-2017	0	5	0	0	0	5
2017-2018	2	4	0	0	0	6

Provide narrative for analysis of student demographics. *(Are you satisfied with your program demographics? Do you have a diverse population of students?)*

The majority of students in the animal science program are females (72%) [males (28%)]. This number is down from 76% female in 2016-17. According to demographics at NCSU Animal Science program (Bachelors), females represent 86% and males represent 14%. In the Associates program at the NCSU Ag Institute, females represent 37% and males represent 63%. The program at Wayne Community College seems to align with the trend of females/males in the bachelors track. Opportunity does exist to recruit more males into the associates program at WCC.

Opportunities still exist in the African-American and Hispanic communities as well as the 25 and older age range. There has been an increase in Hispanic enrollment in the Applied Animal Science program. This can be contributed to the increased relationship with Human Resource managers who are referring workers into the program to obtain a degree to be considered for promotions. The degree is manageable for these students because we are able to offer several courses online so that it does not interfere with work.

References:

<https://report.oirp.ncsu.edu/IR/Students/EnrollmentData/sp18enrol/enrd110701.htm>

Program Enrollment (Fall, Spring, Summer)

Program Enrollment (A15280) Unduplicated		
Year	Enrollment	3-Year Average
2015-16	45	42
2016-17	45	44
2017-18	57	49

Program Enrollment (C15280) Unduplicated		
Year	Enrollment	3-Year Average
2015-16	20	11
2016-17	5	8
2017-18	6	10

Provide narrative for analysis of program enrollment. *(Is enrollment increasing or decreasing? What possible reasons for increase/decrease? Describe how you plan to address program enrollment.)*

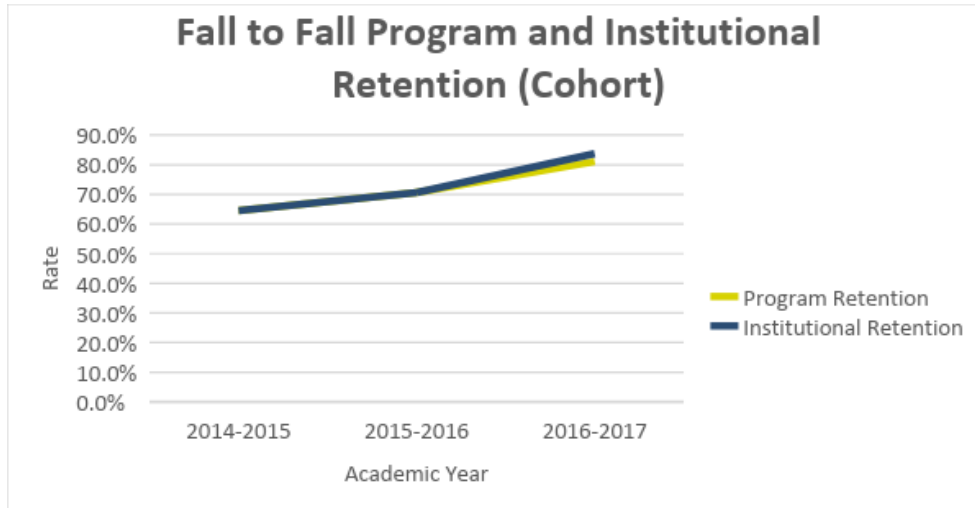
Program enrollment continues to increase especially with the addition of online courses that can be taken in lieu of the hybrid courses. the certificate program enrollment dropped tremendously after the loss of the Animal Science Academy at Rosewood High School. The addition of the online courses is meant to recapture some of the CCP students at Rosewood as well as other area high schools. The addition of the online courses has allowed us to get students from across the state - not just Wayne County students.

Program Outcomes**Retention**

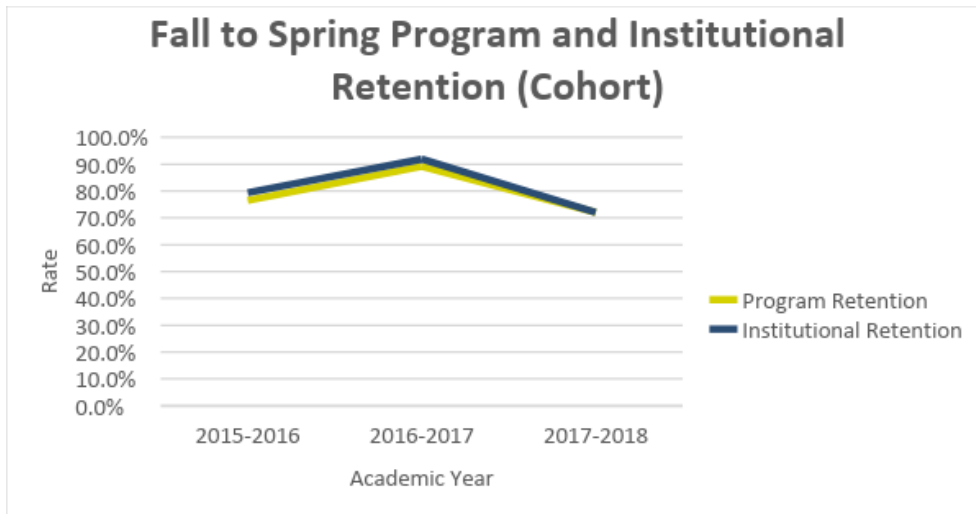
Baseline: 72% (Average of last three years – 2014-15; 2015-16; 2016-17, fall-to-fall program retention)
Standard: 75%
Target: 78%

Data/Results:**Fall-to-Fall**

Year	Fall Enrollment	Grads	Return	Non-Completers	Program Retention	New Program	Institutional Retention
2014-2015	31	8	12	2	64.5%	0	64.5%
2015-2016	34	6	18	10	70.6%	0	70.6%
2016-2017	37	9	21	15	81.1%	1	83.8%

**Fall-to-Spring**

Year	Fall Enrollment	Grads	Return	Non-Completers	Program Retention	New Program	Institutional Retention
2015-2016	34	2	24	7	76.5%	1	79.4%
2016-2017	37	4	29	3	89.2%	1	91.9%
2017-2018	43	2	30	11	74.4%	0	74.4%



Provide narrative for analysis of program retention. *(Based on the data, provide a narrative of your analysis of fall to spring and fall to fall retention. Indicate factors that may have affected your retention. State any changes you plan to address for next year that may affect / increase your retention.)*

Fall to Spring Retention rate dropped some from previous years. This can be attributed to employment and family issues for the students. To address this, I am remaining in contact with most students to try to get students to complete the degree online. We will continue to be in contact with students to work towards completion of the program.

Fall to Fall Retention rate has been steadily increasing. This can be attributed to constant contact with students through Aviso and various ways of communication (in class, calls, texts, emails). Students are encouraged on a regular basis to complete courses and register for courses for upcoming semesters.

We will continue to use Aviso for attendance and early alerts to students in danger of being unsuccessful. I will continue to be in contact with College and Career Promise students to ensure completion of the certificate as well as continued enrollment in the program.

Provide narrative for analysis of standard/target. *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

New program retention standard and target was set based on the three-year baseline data from 2014-15, 2015-16, and 2016-17 fall to fall retention.

Completions

Baseline: 21 (Average of last three years – 2015-16; 2016-17; 2017-18)

Standard: 22

Target: 23

Data/Results:

Number of Graduates (Completions)				
	Degree	Diploma	Certificate	Total
2015-16	8		20	28
2016-17	10		8	18
2017-18	3		14	17

Provide narrative for analysis of completions. (Are you satisfied with your completion rates? How might you increase your completion rates?)

The three-year average number of applied animal science graduates is 20. The number increased since the last program review (up from an average of 8 during the 3 year period). Students are advised during registration period of expected graduation date including a certificate graduation date. Potential graduates are also advised at the beginning of each semester to complete the graduation application and graduate survey. Students are encouraged to complete the certificate graduation application immediately upon fulfilling (or in progress of fulfilling) the requirements. The certificate completion is used on a student's resume in order to help to obtain a work-based learning program or internship which is required for Applied Animal Science degree completion.

Provide narrative for analysis of standard/target. (As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)

New completion standard and target was set based on the three-year baseline data from 2015-16, 2016-17, and 2017-18.

Job Placement / Employment (to be provided by program)**Baseline:** 131% (Average of last three years – 2015-16; 2016-17; 2017-18)**Standard:** 135%**Target:** 140%**Data/Results:**

Employment Demand						
Year	Graduates	# Employed (within 1 Yr)	# Seeking More Education (within 1 Yr)	% Employed & Seeking More Education	Unknown	Other/Comments
2015-16	28	19	5	86%	4	Unknown students are from Rosewood ANS Academy
2016-17	18	16	8	133%	0	The majority of our students are employed (working) while seeking more education which results in a calculation of higher than 100%.
2017-18	17	15	15	176%	0	

Provide narrative for analysis of job placement rates. (Are students finding jobs within the program of study?) (How can your program promote higher employment of students in the field?)

Job placement is very high in the Applied Animal Science program. Students in the Applied Animal Science program get jobs in a variety of animal science fields including vet assistants, lab technicians, service supervisors, research technicians, animal shelter attendants/dispatch as well as working on family farms. Relationships and networking have been developed and maintained with Human Resources Departments with animal science, livestock and poultry industries. HR officials contact Jennifer Johnson regularly for employment of current students for part time positions as well as recent graduates for full time positions. Students who are actively seeking positions are able to find positions within the Applied Animal Science career field.

Provide narrative for analysis of standard/target. (As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)

New job placement standard and target was set based on the three-year baseline data from 2015-16, 2016-17, and 2017-18.

Provide narrative for analysis of Labor Market Data. (Review Labor Market Data provided and provide an assessment of the data.)

The labor market data included in this report shows a decrease in growth for farmers, ranchers and agricultural managers. However, there is a projected increase in agricultural and food science technicians. After

discussion with the Applied Animal Science Advisory Committee, all aspects of agricultural employment should increase. Even though there is a moratorium on swine production in North Carolina, those that are currently in management positions within the swine industry are reaching retirement age. Swine production reached a peak in eastern North Carolina in the late 1980s and early 1990s. The moratorium was established in 1996. Those that began their careers have reached or will reach 30 years of employment soon. There will be an increased need for management and management trainees. (See attached reports from National Pork Council and NC Pork Council.)

The poultry industry in eastern North Carolina and Wayne County is growing. With Butterball, Case Farms and Sanderson Farms all located within a short distance of Wayne Community College, the need for poultry employees is increasing. These companies continue to grow and expand the need for those within animal production and food production.

Licensure and Certification Passing Rates (if applicable) *Not applicable.*

Baseline: XX% (*Average of last three years; identify last three licensure years*)
Standard: XX%
Target: XX%

Data/Results: *Not applicable for the Applied Animal Science program.*

Licensure / Certification Exam – Title

Year	# Tested	% Passing
2010-11		
2012-13		
2013-14		
2014-15		
2015-16		
2016-17		

Provide narrative for analysis of licensure / certification passing rates. (*Are you satisfied with your program licensure rates?*)

Not applicable.

Provide narrative for analysis of standard/target. (*As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.*)

Not applicable.

Third-Party Credentials (if applicable) *Not applicable.*

Baseline: XX# (Average number of completers for the last three years – 2015-16; 2016-17; 2017-18)
Standard: XX#
Target: XX#

Data/Results:**Third-Party Credentials**

Year	Credentials for Program of Study	# Tested	# Completers
2015-16			
2016-17			
2017-18			

Provide narrative for analysis of third-party credentials. (Are there other industry-recognized credentials that needs to be addressed for the program of study?) (What are other means to promote program third-party credentials?)

Not applicable.

Provide narrative for analysis of standard/target. (As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)

Not applicable.

Course Success**Analysis of student success in courses (2015-16; 2016-17; 2017-18)**

Provide narrative for analysis of student success in courses. (Ex – Are more students successful in online courses versus traditional? Are students more successful in certain courses?)

According to the data, in general, students in hybrid courses were more successful and persistence than those in the same online courses. However, the data includes students who were enrolled in the Animal Science Academy at Rosewood High School. These students were enrolled in hybrid courses as high school students on campus at the high school. These students received more support and time dedicated each day to completing the course successfully. Success rates for 2016-17 were lower than 2015-16 and 2017-18. This could be attributed to Hurricane Matthew and the aftermath. Several students faced unforeseen circumstances and were unable to complete courses or did not complete the courses to the best of their ability.

Analysis of student success in distance learning courses (2015-16; 2016-17; 2017-18)

Course Success Rates by Method of Instruction				
Semester	Department	Course Number	% Success	Method of Instruction
Fall 2015	ANS	110	100%	Hybrid
Fall 2015	ANS	115	85%	Hybrid
Fall 2015	ANS	130	73%	Hybrid
Fall 2015	ANS	140	72%	Hybrid
Fall 2015	ANS	170	93%	Hybrid
Fall 2015	ANS	110	73%	Internet
Fall 2015	ANS	141	69%	Internet
Fall 2016	ANS	115	93%	Hybrid
Fall 2016	ANS	130	100%	Hybrid
Fall 2016	ANS	140	93%	Hybrid
Fall 2016	ANS	170	91%	Hybrid
Fall 2016	ANS	110	74%	Internet
Fall 2016	ANS	115	75%	Internet
Fall 2016	ANS	130	75%	Internet
Fall 2016	ANS	141	75%	Internet
Fall 2016	ANS	170	67%	Internet
Fall 2016	ANS	213	100%	Internet
Spring 2016	ACM	111	85%	Hybrid
Spring 2016	ANS	120	80%	Hybrid
Spring 2016	ANS	180	88%	Hybrid
Spring 2016	ANS	213	87%	Hybrid
Spring 2016	ANS	120	100%	Internet
Spring 2016	ANS	180	100%	Internet
Spring 2016	ANS	213	100%	Internet
Spring 2016	ANS	230	75%	Internet
Spring 2016	ANS	120	100%	Traditional
Spring 2016	ANS	210	82%	Internet
Summer 2016	ANS	110	65%	Internet
Summer 2016	ANS	150	79%	Internet
Summer 2016	ANS	160	70%	Internet
Summer 2016	ANS	230	67%	Internet
Fall 2017	ANS	115	89%	Hybrid
Fall 2017	ANS	130	100%	Hybrid
Fall 2017	ANS	140	100%	Hybrid
Fall 2017	ANS	170	92%	Hybrid
Fall 2017	ANS	110	74%	Internet
Fall 2017	ANS	115	69%	Internet
Fall 2017	ANS	130	88%	Internet
Fall 2017	ANS	140	90%	Internet
Fall 2017	ANS	141	75%	Internet
Fall 2017	ANS	170	64%	Internet
Spring 2017	ACM	111	43%	Hybrid
Spring 2017	ANS	120	60%	Hybrid
Spring 2017	ANS	180	50%	Hybrid

Spring 2017	ANS	210	79%	Internet
Spring 2017	ANS	213	54%	Hybrid
Spring 2017	ANS	120	83%	Internet
Spring 2017	ANS	180	57%	Internet
Spring 2017	ANS	213	100%	Internet
Spring 2017	ANS	230	58%	Internet
Summer 2017	ANS	110	60%	Internet
Summer 2017	ANS	150	79%	Internet
Summer 2017	ANS	160	60%	Internet
Summer 2017	ANS	230	100%	Internet
Spring 2018	ANS	210	89%	Internet
Spring 2018	ACM	111	100%	Hybrid
Spring 2018	ANS	120	85%	Hybrid
Spring 2018	ANS	180	100%	Hybrid
Spring 2018	ANS	213	100%	Hybrid
Spring 2018	ANS	120	45%	Internet
Spring 2018	ANS	180	60%	Internet
Spring 2018	ANS	210	100%	Traditional
Spring 2018	ACM	111	78%	Internet
Spring 2018	ANS	213	78%	Internet
Summer 2018	ANS	110	89%	Internet
Summer 2018	ANS	150	83%	Internet
Summer 2018	ANS	230	80%	Internet

Provide narrative for analysis of student success in distance learning courses. *(Are distance education course success rates equivalent to the success rates for other methods of instruction?)*

Since Fall 2016, I have been slowly adding an online course to equal the hybrid courses within the Applied Animal Science program. The success rates for those courses are skewed because they were in the beginning stages of development and did not have ten students in the course. Data will be better analyzed during the next cycle.

Analysis of Program Learning Outcomes (PLO) (2015-16; 2016-17; 2017-18)

- Document PLO cycle for the next four years (2018-19, 2019-20, 2020-21, and 2021-22) in the table below.
- File program learning outcome reports for the past three years (2015-16, 2016-17, and 2017-18) in the Program Review Attachment folder.
- Document changes to the program learning outcomes and/or assessment cycle.

Assessment Cycle	Program Learning Outcomes
2018-19	3,4 (Collect Spring 2019, assess Summer 2019)
2019-20	2 (Collect Fall 2019, assess Spring 2020)
2020-21	1 (Collect Summer 2021, assess Fall 2021)
2021-22	3,4 (Collect Spring 2022, assess Summer 2022)

Other Assessments

Analysis of graduate survey data (2015-16; 2016-17; 2017-18)

Provide narrative for analysis of program-specific graduate survey data. *(What did you learn from the results? What did your graduates indicate needed to be revised within your program?)*

According to the graduate survey cross tabs, most students reached their goals. Those that did not achieve their goals indicated financial hardship or lack of interest in completing their goal. Most students were working full time or part time at the time they completed the survey. Most students were not actively looking for work. This can be attributed to the fact that students within the Applied Animal Science program must complete a work-based learning experience. These students work full time or part time in the field of animal science. These students usually go from part time to full time upon graduation. When completing the survey, they complete the questions based on their current situation.

Analysis of employer survey data (2015-16; 2016-17; 2017-18)

Provide narrative for analysis of program-specific employer survey data. *(What did employers indicate needs improvement within your program (equipment, facilities, program offerings/certificates?)*

According to the employer survey cross tab, those that completed the survey were satisfied with the Applied Animal Science program. However, the need for dedicated lab space and/or classroom space with facilities to maintain animals on campus for short periods of time was greatly indicated.

External Reviews

In addition to SACSCOC, is there an accrediting body specifically related to the program? If so, please name the professional organization, describe the program's current status, and most recent date of accreditation.

The Animal Science Technology program does not have any external accrediting body.

Resources

Program facilities - location and adequacy

Provide narrative for program facilities adequacy and/or needs.

Currently, the Applied Animal Science program is housed in the Magnolia building. Classes are held in MAG 209 (lab) and MAG 223 or 222 (computer lab). The Applied Animal Science program shares these classrooms with the other 5 programs (Swine Management, Agribusiness, Sustainable Agriculture, Turfgrass and Forestry) in the Agriculture and Natural Resources Department. Lectures and class are posted online in Moodle, but labs are held for hybrid courses (4 each semester). While MAG 209 is an ideal location for most lab settings, it is often not available because other lab sections are offered at the same time. Storage is an issue in MAG 209 as well. The Animal Science program uses specimens for dissections as well as other technology that is currently stored in the lab prep room adjacent to 209. In some instances, the computer lab is necessary for certifications and virtual dissections prior to lab in 209. Coordinating with other instructors is a challenge. Several previous planning objectives that have been funded are large and have taken up space in the prep room. These items need to be housed inside in a climate controlled environment and need to be easily accessible for labs. Also, the advisory committee has requested space to house animals on a temporary basis in order to handle labs and hands on experiences for students.

For the future, the Applied Animal Science program needs a dedicated space to house animals with access to computers within the lab as well as adequate storage space to accommodate the equipment used in the Animal Science field.

Library resources

Provide narrative for program library resources. *(Are library resources adequate for your program?)*

The library/media sources are current and up to date for Applied Animal Science students, and resources to our distance education students are current as well. Currently, video resources are being housed on WCC MediaSite and are available via Moodle. We do not make any special requests for library resources as our students are not required to do any extensive research projects within their ANS courses.

Planning Objectives (2015-16; 2016-17; 2017-18)

- Verify previous year's prioritized planning objectives end-of-year status reports are filed in Program Review Planning Objective EOY (End of Year) Status Reports folder.
- Provide a summary of planning objectives submitted for the last three years, including the use of results, of the planning objectives in the table provided.

Summary of Planning Objectives

Planning Year	Objective(s) Submitted	Use of Results
2015-16	Moisture Analyzer (14-15 carryover)	100% of students in ANS 115 - Animal Feeds & Nutrition used and were proficient in the use of the moisture analyzer.
2016-17	N/A	N/A
2017-18	Breed N Betsy Poultry Processing Equipment	Students used in Spring of 2019 Students used in Fall of 2018

Overall analysis of the strengths of the program

Provide narrative for analysis of the strengths of the program.

The Applied Animal Science classes are taught online and hybrid with hybrid classes being on the 8-week semester schedule. This allows for longer hands-on labs off-campus as well as allowing students to complete more hours to complete a degree in a timely manner. Students are also able to work and complete WBL (co-op). The Applied Animal Science degree also covers a wide range of animal species (companion animals to livestock) so that students are exposed to and have some experience with a diversity of animals to allow them to be more marketable in the workplace.

The Applied Animal Science faculty is experienced and committed to student success and is willing to overload courses, teach overloads, and provide pathways to success in advising.

The Advisory Committee is active and participates in meeting the needs of students by providing feedback to faculty as well as being actively involved in providing internships and guidance to student employment.

The Applied Animal Science faculty also addresses students' needs and issues through active advising. Students are scheduled time each semester to discuss upcoming semester classes, register for classes, work on low or poor performance, apply for graduation. Each student is given individual attention in order to make them successful students and employees in the future.

Overall analysis of the weaknesses of the program

Provide narrative for analysis of the weaknesses of the program.

In the last program review, a lack of dedicated animal science equipment was listed as a weakness. Since the last program review, equipment has been purchased, however, a lack of a dedicated space for the equipment has become an issue. Feed lab equipment as well as artificial insemination equipment can be large and expensive and would need to be housed in a secure location. The Agriculture & Natural Resources Department currently shares the space and there is no room to add any more equipment. A dedicated space to house animals on campus would be beneficial to students. Hands on learning experiences and necessary job skills would be enhanced. It would also be beneficial as a recruiting tool for future students.

Recommendations

- Complete 2018-2019 Program/Service Review/Outcome Assessment Recommendation Worksheet to address action items from program review and outcome analysis with target date; and methods to assess action items.
- File Review/Outcome and Assessment Recommendation Worksheet in Recommendation and Follow-Up folder.
- Recommendation follow-up reports to be addressed spring semester following review year (2019-20 and 2020-21).

Recommendations from Program Review and Outcome Assessments**Name of Program: Applied Animal Science****2018-2019 Program Review and Outcome Assessments Recommendations****(Address program outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)**

Outcome (Identify projected outcomes as a result of your program/service review.)	Target Date (Identify your projected target date for completion of action items.)	Actions/strategies to achieve outcomes and how you will assess the action/strategy
Retention – Fall to Fall Baseline: 72% Standard: 75% Target: 78%	Spring 2022	Continue to use Aviso to identify students who may be at risk. Continue to actively advise students for course selections and registration.
Completions - Baseline: 21 Standard: 22 Target: 23	Spring 2022	Continue to identify potential graduates in certificate and AAS degree along with active advising of students.
Job Placement - Baseline: 133% Standard: 135% Target: 140%	Spring 2022	Continue to work with industry contacts, employers, HR representatives and advisory committee members to assist students in finding jobs.
Licensure/Certification Passing Rates (if applicable) - Not applicable.	N/A	N/A
Third-Party Credentials (if applicable) – Not applicable.	N/A	N/A
Additional Recommendation – Not applicable.	N/A	N/A

Approvals

- Using DocuSign (electronic signature), the Office of Institutional Effectiveness (IE) will review the Program/Service Review and Outcome Assessments when completed by the responsible program/service personnel. The Office of Institutional Effectiveness will forward the review documents to the appropriate administrator upon completion.
- Using DocuSign (electronic signature), appropriate Vice President/Associate Vice President is asked to review and approve the Service Review and Outcome Assessment and Recommendations as submitted.

IE Acceptance / Date: Dorothy Moore 6/8/2020Administrator Approval / Date: Patty Pfeiffer 6/8/2020