Northern Oklahoma College
Agriculture Sciences
Program Assessment
Completed June 2017

Based on the thorough internal or external program review addressing all criteria in policy, a comprehensive report should be possible within ten or fewer pages. This program review template is provided to assist institutions in compiling the program review information, which is to be presented to the institutional governing board prior to submission to the State Regents. Executive Summaries should be possible within two pages using the provided template (Program Review Executive Summary Template).

Description of the program's connection to the institutional mission and goals:

The mission of Northern Oklahoma College, the State's oldest community college, is a multi-campus, land-grant institution that provides high quality, accessible, and affordable educational opportunities and services which create life-changing experiences and develop students as effective learners and leaders within their communities in a connected, ever-changing world.

Northern Oklahoma College will be recognized as a model institution and leader in academic quality and cultural enrichment, promoting student success, collaborative learning, creative and forward thinking, and community responsiveness.

The core values of Northern Oklahoma College are that through personalized education we believe in providing individualized services leading our students to achieve their academic goals in a welcoming and safe environment, and we will provide support to students in and out of the classroom so that they receive a full college experience with diverse opportunities. Another core value is community and civic engagement. We believe that educated citizens are necessary for a healthy, democratic society, and that free and open expression and an appreciation for diversity are cornerstones of higher education, and we believe in economic and environmental sustainability and the importance of enriching the intellectual, artistic, economic, and social resources of our communities.

We at Northern Oklahoma College also believe in the inherent value of intellectual pursuit for both personal and professional growth, as well as the need to prepare students for the 21st century professions, and that a knowledge-centered institution is vital to a knowledge-based economy, and we measure our success against national models and standards of excellence.

3.7.5 Process (Internal/External Review):
Previous Reviews and Actions from those reviews:

Analysis and Assessment (including quantitative and qualitative measures) noting key findings from internal or external reviews and including developments since the last review:

The last OSRHE program review for the Agriculture degree was in 2012 but through a low productivity program report When calculated with the updated numbers from the two most recent years of enrollment numbers (2007-2012 at the time), the 5-year average for the program was 32.8 in enrollment and 7.6 in graduates. As noted in productivity numbers below, the degree program has grown considerably in the last several years and is currently a vital degree program with four options for students to pursue interests in Ag Business, Ag Communications, Plant and Soil Sciences, and Pre-Veterinary studies.

A. Centrality of the Program to the Institution's Mission:

The mission of Northern Oklahoma College, the State's oldest community college, is a multi-campus, land-grant institution that provides high quality, accessible, and affordable educational opportunities and services. Students in the A.S. degree program meet general education needs and can specialize in 4 different areas aiding in smooth transfer in high demand degree areas for our region.

B. Vitality of the Program:

B.1.Program Objectives and Goals:

Students upon completion of the Agricultural Science degree will be able to:

- Explain the importance of animal and plant production systems and the role they play in the food and fiber sector of the global economy
- Demonstrate effective oral and written expression
- Interpret and analyze agricultural production data.

B.2 Quality Indicators (including Higher Learning Commission issues):

Date	5/16/2017
Competency # and Description	1. Explain the importance of animal and plant production systems and the role they play in the food and fiber sector of the global economy
Course	AGRI 1113 – Agricultural Economics AGRI 1124 – Intro to Animal Science AGRI 1223 – Intro to Plant/Soil Science
Activity	AGRI 1113 - Exam AGRI 1124 - Exam AGRI 1223 - Exam
Measurement (attached copy of instrument with point distribution)	AGRI 1113 – Exam 1 AGRI 1124 – Exam 1 AGRI 1223 – Exam 1
Evaluation Criteria	70% pass rate on exam
2015-2016 Results	AGRI 1113 10 out of 15 – 67% AGRI 1124 16 out of 25 – 64% AGRI 1214 13 out of 13 – 100%

2016-2017 Results	AGRI 1113 17 out of 22 – 77% AGRI 1124 8 out of 20 – 40% AGRI 1214 9 out of 20 – 45%
Summary of changes for 2016-2017	No changes will be made due to submission of expanded degree options that are pending incorporation.
Recommendation for changes for 2017-2018	No changes will be made due to submission of expanded degree options that are pending incorporation.
Timeline for Review	Fall/spring data will be collected and reviewed in the spring and instructors from all campuses will determine needed adjustments.
Date	5/16/2017
Competency # and Description	2. Demonstrate effective oral and written expression
Course	AGRI 1113 – Agricultural Economics AGRI 1124 – Intro to Animal Science AGRI 1223 – Intro to Plant/Soil Science AGRI 2124 – Fund of Soil Science AGRI 2222 – Live Animal Evaluation
Activity	AGRI 1113 – Written Report AGRI 1124 - Breed presentations AGRI 1223 - Crop Prod. Paper AGRI 2124 – Soil Test Report AGRI 2222 - Final reasons-OSU
Measurement (attached copy of instrument with point distribution)	AGRI 1113 – Written Report AGRI 1124 - Breed presentations AGRI 1223 - Crop Prod. Paper AGRI 2124 – Soil Test Report AGRI 2222 - Final reasons-OSU
Evaluation Criteria	70% pass rate on activity
2015-2016 Results	AGRI 1113 15 out of 15 - 100% AGRI 1124 25 out of 25 - 100% AGRI 1214 13 out of 13 – 100% AGRI 2124 10 out of 10 – 100% AGRI 2222 15 out of 15 - 100%
2016-2017 Results	AGRI 1113 20 out of 21 - 95% AGRI 1124 18 out of 20 - 90% AGRI 1214 20 out of 20 – 100% AGRI 2124 10 out of 12 – 83% AGRI 2222 4 out of 4 – 100%
Summary of changes for 2016-2017	No changes will be made due to submission of expanded degree options that are pending incorporation.

Recommendation for changes for 2017-2018	No changes will be made due to submission of expanded degree options that are pending incorporation.
Timeline for Review	Fall/spring data will be collected and reviewed in the spring and instructors from all campuses will determine needed adjustments.
Date	5/16/2017
Competency # and Description	3. Interpret and analyze agricultural production data.
Course	AGRI 1113 – Agricultural Economics AGRI 1124 – Intro to Animal Science AGRI 1223 – Intro to Plant/Soil Science AGRI 2124 – Fund of Soil Science AGRI 2222 – Live Animal Evaluation
Activity	AGRI 1113 - Homework AGRI 1124 – Exam AGRI 1223 - Exam AGRI 2124 - Exam AGRI 2222 - Exam
Measurement (attached copy of instrument with point distribution)	AGRI 1113 - Homework AGRI 1124 – Exam 3 AGRI 1223 – Exam 2 AGRI 2124 – Exam 3 AGRI 2222 – Mid-term Exam
Evaluation Criteria	Pass rate of 70% on each activity
2015-2016 Results	AGRI 1113 12 out of 15 – 80.0% AGRI 1124 13 out of 25 – 52.0% AGRI 1214 8 out of 13 – 61.5% AGRI 2124 8 out of 10 – 80.0% AGRI 2222 9 out of 14 – 64.3%
2016-2017 Results	AGRI 1113 15 out of 22 – 68% AGRI 1124 12 out of 20 – 60% AGRI 1214 5 out of 20 – 25% AGRI 2124 8 out of 12 – 67% AGRI 2222 4 out of 4 – 100%
Summary of changes for 2016-2017	No changes will be made due to submission of expanded degree options that are pending incorporation.
Recommendation for changes for 2017-2018	No changes will be made due to submission of expanded degree options that are pending incorporation.
Timeline for Review	Fall/spring data will be collected and reviewed in the spring and instructors from all campuses will determine needed adjustments.

B.3. Minimum Productivity Indicators:

	Head Count/Graduates

Time Frame (e.g.: 5 year span)	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Agricultural Science	**50/14**	**54/22**	**71/27**	**103/22**	**104/21**

B.4. Other Quantitative Measures:

a. Number of courses taught exclusively for the major program for each of the last five years and the size of classes:

Course Number	**Course Name**	**Sections/Average Size of Class**				
		2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
AGRI 1113	Agriculture Economics	-	1/21	1/13	1/16	1/23
AGRI 1124	Intro to Animal Science	1/21	1/20	1/25	1/25	1/20
AGRI 1214	Intro to Plant Science	1/13	1/16	1/16	1/13	1/20
AGRI 2124	Fund of Soil Science	1/5	1/10	1/11	1/12	1/12

b. Student credit hours by level generated in all major courses that make up the degree program for five years:

Course	**Course Name**	**Hours Generated**				
		2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
AGRI 1113	Agriculture Economics	0	63	39	48	69
AGRI 1124	Intro to Animal Science	84	80	100	100	80
AGRI 1214	Intro to Plant Science	52	64	64	52	60
AGRI 2124	Fund of Soil Science	20	40	44	48	48
TOTAL		**156**	**247**	**247**	**248**	**257**

c. Direct instructional costs for the program for the review period:

Three full-time faculty teach within the Agriculture program as well as offering other general education science coursework. A full-time director of the Sheep Barn also teaches part-time each semester as part of his annual contract. The average cost for a 3-credit hour program course (including salary and benefits) is $7611.

4 courses in 5-year period were 3-credit hours at a cost of $30,444
15 courses in 5-year period were 4-credit hours at a cost of ($12,685 per) $190,275

Total instructional cost for required program courses-$220,719.

d. The number of credits and credit hours generated in the program that support the general education component and other major programs including certificates:

Course	Course Name	Hours Generated				
		2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
MATH 2023	Elementary Statistics	2214	2493	2478	2442	2304

e. A roster of faculty members, faculty credentials and faculty credential institution(s). Also include the number of full time equivalent faculty in the specialized courses within the curriculum:

Faculty	Credential	Institution that granted degree
Kurt Campbell	Doctor of Veterinary Med	Oklahoma State University
Bart Cardwell	MS in Animal Science	Oklahoma State University
Tricia Moore	MS in Animal Science	Oklahoma State University

f. If available, information about employment or advanced studies of graduates of the program over the past five years:

Degree program is designed for transfer only

g. If available, information about the success of students from this program who have transferred to another institution:

As one indication of student success, Northern receives annual reports of transfer students' performance in the NOC-Gateway program in Stillwater through the Memo of Understanding. In the last two years, this report has indicated that the retention rate of NOC transfer students is greater than the first year at OSU retention rate of other transfer students for each of the years studied indicating that NOC graduates are well prepared for continued success at the four-year institution.

B.5. Duplication and Demand:

In cases where program titles imply duplication, programs should be carefully compared to determine the extent of the duplication and the extent to which that duplication is unnecessary. An assessment of the demand for a program takes into account the aspirations and expectations of students, faculty, administration, and the various publics served by the program. Demand reflects the desire of people for what the program has to offer and the needs of individuals and society to be served by the program.

B.5. Duplication and Demand Issues:

Address Duplication:

NA

Address Demand:

NA

B.5.a. Detail demand from students, taking into account the profiles of applicants, enrollment, completion data, and occupational data:

The dramatic increase in enrollment and graduates reported above from 50 and 14 in 2012-2013 to 104 and 21 in 2016-2017 is the best indicator of demand from students. An active Agriculture Advisory Board also reviews curriculum to assure occupational skills are being addressed.

B.5.b. Detail demand for students produced by the program, taking into account employer demands, demands for skills of graduates, and job placement data:

The A.S. in Agriculture is a transfer degree so direct workforce data is not tracked.

B.5.c. Detail demand for services or intellectual property of the program, including demands in the form of grants, contracts, or consulting:

NA

B.5.d. Detail indirect demands in the form of faculty and student contributions to the cultural life and well-being of the community:

The Agriculture degree program has created numerous educational opportunities for area high school students with competitions hosted such as Agricultural Interscholastics, Livestock Judging.

B.5.e. The process of program review should address meeting demands for the program through alternative forms of delivery. Detail how the program has met these demands:

Currently, the Agriculture degree is offered only on the NOC Tonkawa campus with a heavy focus in experiential learning that does not lend itself to ITV or online delivery formats.

B.6. Effective Use of Resources:

Resources include financial support, (state funds, grants and contracts, private funds, student financial aid); library collections; facilities including laboratory and computer

equipment; support services, appropriate use of technology in the instructional design and delivery processes, and the human resources of faculty and staff.

Resources used in support of this degree program are shared among all students, including library materials, tutoring access on site and through Tutor.com and writing labs.

Institutional Program Recommendations: (describe detailed recommendations for the program as a result of this thorough review and how these recommendations will be implemented, as well as the timeline for key elements)

Recommendations	Implementation Plan	Target Date
Agricultural Sciences faculty will review data to determine if program objectives are be met. If students are falling short of the programs expectations, Agricultural Sciences faculty will analyze those areas further to determine where changes in the learning process and/or curricula need to be made in order to achieve benchmarks.	Annual review of assessment data.	May 2018
Continue to increase internship opportunities.		1-3 years
Increase research opportunities for students.		1-3 years

Program-Level Outcomes Timeline

Program Objectives Associate in Agricultural Science	Course Mapping	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Objective: Explain the importance of animal and plant production systems and the role they play in the food and fiber sector of the global economy	AGRI 1113 AGRI 1124 AGRI 1214	X	X	X	X	X
Objective: Demonstrate effective oral and written expression	AGRI 1113 AGRI 1124 AGRI 1214 AGRI 2124 AGRI 2222	X	X	X	X	X
Objective: Interpret and analyze agricultural production data.	AGRI 1113 AGRI 1124	X	X	X	X	X

	AGRI 1214 AGRI 2124 AGRI 2222					

Note: Course competencies are reinforced through additional coursework beyond course designated for assessment purposes.

Summary of Recommendations:

	Department	**School/College**	**Institutional**
Possible Recommendations:			
Expand program (# of students) Review curricula and learning assessments to ensure program benchmarks are being met.	Increase of 5% each year. Annual review.		

Tricia Moore

_____Date 7.6.17_____

Division/Department Chair

_____Date_____

Vice President for Academic Affairs