University of Nebraska at Kearney

OpenSPACES@UNK: Scholarship, Preservation, and Creative **Endeavors**

Academic Program Reviews

4-11-2022

Program Review: Agribusiness Program

University of Nebraska at Kearney Agribusiness Faculty

Follow this and additional works at: https://openspaces.unk.edu/apr



Part of the Agribusiness Commons

Recommended Citation

University of Nebraska at Kearney Agribusiness Faculty, "Program Review: Agribusiness Program" (2022). Academic Program Reviews. 26.

https://openspaces.unk.edu/apr/26

This Article is brought to you for free and open access by OpenSPACES@UNK: Scholarship, Preservation, and Creative Endeavors. It has been accepted for inclusion in Academic Program Reviews by an authorized administrator of OpenSPACES@UNK: Scholarship, Preservation, and Creative Endeavors. For more information, please contact weissell@unk.edu.

UNK: CBT

Agribusiness Program

Self-Study Report

AGBS Faculty Spring 2022

Table of Contents

Introduction	1
General Program Characteristics	2
Degree Program and Curriculum	3
Student Performance Measures	8
Institutional Contributions	13
Student Profile and Support Data	13
Faculty Matters	14
Resource Bases	14
Program Comparisons	15
Future Direction	19
Appendix A: AGBS 4-Year Suggested Schedule	21
Appendix B: AGBS Course Descriptions	23
Appendix C: AGBS Assessment Rubrics	26
Appendix D: AGBS Faculty Vita	30
Appendix E: Library Resources / Services	37

Introduction

The Agribusiness program has a long history with UNK being in existence when then Kearney State College entered the UN system as University of Nebraska at Kearney in 1991. Prior to 2018, the Agribusiness program was housed in the Department of Economics in the College of Business and Technology. During its tenure in the Department of Economics, the Agribusiness program shared curriculum with the Economics program and Agribusiness faculty taught both Economics courses and Agribusiness courses. Beginning in 2018, the Agribusiness program was moved to the Marketing / Supply Chain Management department and the department was renamed Marketing / Agribusiness / Supply Chain Management. Currently, the Agribusiness program is housed in the Marketing / Agribusiness / Supply Chain Management department and Agribusiness faculty continue to teach both Agribusiness courses and Economics courses (now offered through the Accounting / Finance / Economics department).

According to the college website, "The College of Business and Technology provides value to Nebraska by preparing our diverse student body to compete in dynamic professional environments and by promoting academic, social, technological, and economic development. The faculty and staff achieve this mission by:

- Providing student-centered educational opportunities including experiential learning;
- Advancing knowledge through applied and pedagogical scholarship;
- Providing service to our stakeholders.

The faculty and staff are dedicated to providing students with rich experiential learning opportunities, including internships, student research, and consulting on real-world projects."

The Agribusiness program supports / contributes to the College mission through its curriculum by providing students opportunities to network with area agribusiness professionals during classroom visits, using classroom simulations in futures trading, and completion of internships. The agribusiness program also makes extensive use of the College's dedicated Career Center and its internship directors to assist students in professional development and career planning.

According to the college website, "The Marketing / Agribusiness / Supply Chain Management Department's goal is to:

- To provide students with high quality undergraduate experiences that will lead to successful
 completion of Business Administration degrees and appropriate entry level jobs in their chosen
 careers.
- To provide students with a variety of classroom experiences including lectures, case studies, problem-solving, computer exercises, presentations and role-playing that lead to a thorough understanding of the subject matter. To complement these classroom experiences with learning environments fostering strong student/faculty relationships through advising and mentoring.
- To ensure that students are exposed to both the theory and practice of business by giving them
 opportunities to apply classroom knowledge to actual situations in the marketplace.
- To develop students' abilities to perceive and analyze problems and opportunities so that they might apply those techniques in finding solutions throughout their professional careers.

The Agribusiness program supports / contributes to the Department's mission through its curriculum by providing students opportunities to network with area agribusiness professionals during classroom

visits, using classroom simulations in futures trading, hands on activities in analyzing financial statements; and peer-to-peer learning. Agribusiness faculty serve as academic advisors for agribusiness majors and minors providing valuable knowledge and suggestions for students pursuing careers in the diverse field of agribusiness. The Agricultural Business Association, the agribusiness student organization, also provides valuable personal / professional development opportunities for agribusiness students and additional opportunities to network with local agribusiness professionals. Additionally, there are three Agribusiness scholarships - Ron and Carol Cope Agribusiness Scholarship, Frank and Shirley Silbert Agribusiness Scholarship, and the Nebraska Cooperative Council Scholarship - available to provide financial support to students pursuing a degree in Agribusiness.

The Department of Marketing, Agribusiness and Supply Chain Management offers:

Agribusiness Comprehensive, Bachelor of Science

Minor in Agribusiness (available for students pursuing majors in other disciplines)

Prior to 2018/19 AY, the Agribusiness Program was housed in the Department of Economics. While housed in the Department of Economics, the programs shared curriculum and assessment data collection / reporting. However, beginning 2018/19 AY, Department of Economics was dissolved and the Economics programs moved to the Department of Accounting / Finance and the Agribusiness program was moved to the Marketing / Supply Chain Management Department (the department was also renamed MKT / AGBS / SCM). This move necessitated the development of an assessment plan unique to the Agribusiness program and greater separation of the curriculum. Although no longer housed in Economics, it is important to note that Agribusiness faculty are responsible for teaching both the AGBS courses and ECON courses which are now in a different department.

The last APR for the Economics / Agribusiness program was in 2017. Given the recent AACSB accreditation visit, the Department of Economics was granted approval to conduct an expedited APR of which the Agribusiness program was included. However, given the combined nature of the report there is limited information of past performance, achievements since last program review specific to Agribusiness to draw upon; thus, the focus of this document is on the Agribusiness program since 2018.

General Program Characteristics

Agribusiness is the network of services that supports production, processing, marketing, financing, distribution and development of agricultural commodities / resources. The agribusiness curriculum integrates traditional business courses with agribusiness coursework to prepare students for diverse careers within agribusiness.

One of the unique aspects of our agribusiness program is that it is offered through Department of Marketing, Agribusiness, and Supply Chain Management within the College of Business and Technology. Thus, the Agribusiness program at UNK prepares students for careers in all areas of agricultural business by providing students with a comprehensive business background through courses in accounting, finance, management, marketing, and business communications. In addition, our students are exposed to different aspects of technical agriculture through required and elective courses in biology, agronomy, chemistry, soil science, geography, water resources, and mathematics.

Within the agribusiness program, the study of business and agriculture is brought together when our students complete courses in general economics, farm and ranch management, agribusiness

management, agricultural finance, agricultural marketing, agricultural price analysis, and economics of the agricultural sector. The objectives of these courses are to (1) to provide our students with a knowledge and understanding of external events that have a major impact on agricultural business and (2) enable our students (as future managers) to anticipate these events and to understand the opportunities and problems for an agricultural business that may occur as a result. These courses also make our program unique, in that we attempt to provide a unified view of the risks and opportunities that exist for agricultural businesses.

In addition to coursework, our students have opportunities to earn college credit while working in agricultural businesses by participating in the Internship program in the College of Business and Technology. Our students have completed a variety of internships including: crop scouts / agronomy, seed sales, grain merchandisers, grain elevator management, agricultural lending, events planning, and farm management.

The integration of traditional business courses with agribusiness coursework and opportunities for gaining real world agricultural experience equips our students to be well-rounded managers of any agricultural business. Agriculture is important to the state's economy and woven into the fabric of our community. Thus, Agribusiness graduates are well positioned to pursue diverse careers within agribusiness as shown by the program's high placement rates.

Agriculture is important to the state's economy and many career fields are seeking employees that have some basic understanding of the agricultural sector. The Agribusiness Minor, introduced in 2019, provides students the opportunity to gain this basic understanding and complements a wide variety of programs of study.

Degree Program and Curricula

The Department of Marketing, Agribusiness and Supply Chain Management offers:

Agribusiness Comprehensive, Bachelor of Science

Minor in Agribusiness (available for students pursuing majors in other disciplines)

Agribusiness curriculum integrates traditional business courses with agribusiness coursework to prepare students for diverse careers within agribusiness (see Appendix A for 4-year plan of study). The agribusiness program has four key components:

General Studies (requirements dictated by University): 30 hours in 10 key areas (LOPERs) across three broad categories Foundational requirements, Broad Knowledge Requirements, and Dispositional Requirements.

Foundational Requirements (foundational academic skills):

LOPER 1: First-year Seminar (3 hours)

LOPER 2: Writing Skills (3 hours)

LOPER 3: Oral Communication Skills (3 hours)

LOPER 4: Mathematics, Statistics, and Quantitative Reasoning (3 hours)

Broad Knowledge Requirements (broad knowledge of the arts and sciences):

LOPER 5: Visual or Performing Arts (3 hours)

LOPER 6: Humanities (3 hours) LOPER 7: Social Science (3 hours)

LOPER 8: Natural Science (3 hours minimum)

Dispositional Requirements (dispositions that prepare students for responsible, productive lives in a democratic, multicultural society)

LOPER 9: Civic Competency and Engagement (3 hours) LOPER 10: Respect for Human Diversity (3 hours)

LOPER 11: Wellness (optional)

The Agribusiness program utilizes the General Studies program and incorporates it within the curriculum. For example, ECON 270 (Principles of Macroeconomics) and ECON 271 (Principles of Microeconomics) are general studies courses (Social Science category) required within the program. In addition, the Agribusiness program requires additional coursework in math (MATH 120 (Finite Math) or MATH 123 (Calculus)) and statistics (MGT 233 (Business Statistics)) beyond the minimum (MATH 102 (College Algebra)) required by General Studies. Agribusiness students are required to complete a lab course in either Biology or Chemistry course (counted in Natural Sciences category). However, because all these courses are also general studies courses, students earn general studies credit while also completing degree requirements.

Agribusiness Core Requirements (business core - most courses common with all business majors): 29 hours

BSAD 100 - Exploring Business (1 hour)

ACCT 250 – Principles of Accounting I (3 hours)

ACCT 251 – Principles of Accounting II (3 hours)

BSAD 295 – Business Communications (3 hours)

MKT 300 – Principles of Marketing (3 hours)

MGT 301 – Principles of Management (3 hours)

FIN 308 – Principles of Finance (3 hours)

ACCT 311 - Business Law (3 hours)

MGT 493 – Social Responsibilities of Business: Issues and Ethics (3 hours)

MGT 495 – Administrative Strategy and Policy (3 hours)

BSAD 400 - Professional Readiness (1 hour)

The Agribusiness program makes full use of the common-business core within CBT; courses in the core provide agribusiness students with a solid foundation in basic business and contributes to the increasing our graduate's competitiveness in the job market.

Agribusiness Economics Core Requirements (agribusiness core - courses focused on the unique aspects of agriculture): 25 hours

AGBS 110 – Introduction to Agribusiness (2 hours)

AGBS 315 – Agribusiness Management (2 hours)

AGBS 335 – Agricultural Marketing (3 hours)

AGBS 350 – Economics of the Agricultural Sector (3 hours)

AGBS 398 – Farm and Ranch Management (3 hours)

AGBS 415 – Agricultural Price Analysis (3 hours)

AGBS 435 – Agricultural Finance (3 hours)

ECON 320 - Intermediate Microeconomics (3 hours)

ECON 321 – Intermediate Macroeconomics or ECON 322 – Money and Banking (3 hours)

The agribusiness core courses bring together the study of business and agriculture. The objectives of these courses are to (1) to provide our students with a knowledge and understanding of external events that have a major impact on agricultural business and (2) enable our students (as future managers) to anticipate these events and to understand the opportunities and problems for an agricultural business that may occur as a result. These courses also make our program unique, in that we attempt to provide a unified view of the risks and opportunities that exist for agricultural businesses (see Appendix B for course descriptions).

Agribusiness Major Elective Component (agribusiness electives - courses allow students to individualize program to own interests): 8 hours

AGBS 475 – Agribusiness Internship (up to 6 hours)

BIOL 301 - Introduction to Soils

BIOL 380 - Agronomy

GEOG 301 – Geography of Soils

GEOG 321 - Economic Geography

GEOG 340 - Developing Nations

GEOG 400 - Water Resources

GEOG 412 – Environmental Planning

GEOG 417 – GIScience Principles and Concepts

GEOG 418 - Working with GIScience and Spatial Analysis

Electives approved by Advisor

The agribusiness electives provide students with exposure to different aspects of technical agriculture through elective courses in agronomy, soil science, geography, and water resources. In addition to coursework, agribusiness students can earn college credit while working in agricultural businesses by completing an internship (AGBS 475). While not required for graduation, agribusiness students are encouraged to participate in this important experiential learning activity. The courses provide agribusiness students the opportunity to individualize their agribusiness program to their own interests / career goals.

The current curriculum is the result of changes that have taken place over time. Agribusiness faculty regularly review the curriculum for currency and make changes when appropriate. For example, AGBS 415: Agricultural Price Analysis was added to the curriculum in 2008, AGBS 110: Introduction to Agribusiness and AGBS 315: Agribusiness Management were added to the curriculum in 2015. Recent curriculum changes and rationale for those changes are provided below.

The most recent change to the Agribusiness program took place in 2015/16. The agribusiness curriculum was revised by removing three courses (MIS 302, ECON 300, and ECON 485), adding two exiting courses (ECON 320, ECON 321 or ECON 322), and adding two new courses (AGBS 110 and AGBS 315). The rationale for the changes is provided below.

In 2015/16, the Agribusiness Core Requirements (business core) hours were reduced by removing the course MIS 302 (Principles of Management Information Systems) to allow incorporating additional coursework beneficial to the agribusiness major and increase competitiveness of graduates in the job market. While the course is no longer required for Agribusiness students, the content has been

integrated throughout the agribusiness curriculum and has allowed tailoring of the information for the agricultural sector. In addition, the Agribusiness program is not under AACSB accreditation and thus does not have to maintain the common business core.

Concurrently in 2015/16, the Agribusiness core (Agribusiness Economics Core) hours were increased by removing two existing courses (ECON 300 and ECON 485), adding two existing courses (ECON 320, ECON 321 or ECON 322), and creating two new courses (AGBS 110 and AGBS 315). The rationale for each of these changes is briefly discussed below.

There were two reasons for removing ECON 300 (2 hours) and ECON 485 (1 hour) from the agribusiness curriculum. First, the Department was considering increasing the credit hours for each course which would have negatively impacted the elective hour component of the agribusiness program. Second, to be most beneficial to graduating students, the types of projects completed by agribusiness students could differ substantially from those majoring in economics. In addition, the content and skills obtained and assessed in both ECON 300 and ECON 485 could be incorporated into the existing curriculum and the two new agribusiness courses. Separating the agribusiness majors from these courses provided the Economics department greater flexibility in changing the credit hours and scheduling for both ECON 300 and ECON 485.

There were two reasons for adding ECON 320, and ECON 321 or ECON 322 (6 hours) to the revised agribusiness program. First, while much of the intermediate level economic content is covered to some extent in upper-division agribusiness courses (e.g., AGBS 398 and AGBS 350), agribusiness students were not receiving in-depth instruction in these areas. Thus, adding these courses provided agribusiness students with increased preparation in economics while also allowing greater focus (coverage) of agribusiness content in upper-division agribusiness coursework. Second, many graduate schools have Intermediate Micro (ECON 320) and Intermediate Macro (ECON 321) as entry requirements; thus, the addition of these courses provided better preparation for agribusiness students wanting to go to graduate school. The choice between Intermediate Macro (ECON 321) or Money and Banking (ECON 322) was provided for students desiring to pursue a career in agricultural lending as ECON 322 provides foundational knowledge of the money and banking system in the U.S.

The addition of AGBS 110 (Introduction to Agribusiness) provided students an entry point to the agribusiness program and agribusiness faculty the opportunity to connect with agribusiness students earlier in their program. As designed, the course introduces students to the study of agribusiness, how agriculture is different from other industries, and what types of careers are available. Career exploration is aided by the introduction and use of agribusiness specific job-search sites. Students are also introduced to the types of writing and presentation skills expected in the discipline, in addition to locating and using agricultural data. Local agribusiness professionals serve as guest speakers throughout the semester providing students the opportunity to network with and learn about diverse career opportunities in agribusiness.

The addition of AGBS 315 (Agribusiness Management) provided the means of covering content on Cooperatives, an area that had been missing in the program. As designed, the course builds upon the basic management principles and skills learned in MGT 301 (Principles of Management), exposes students to the different types of businesses common in agriculture (e.g., cooperatives, sole-proprietorship, family owned-corporations, etc.), and the challenges managers face in these business environments.

All students graduating with a degree from CBT are required to complete 3 hours of designated Experiential Learning (EL) coursework. Within the agribusiness program, students meet this requirement through completing AGBS 415: Agricultural Price Analysis, which is required for the program, or through completing AGBS 475: Internship, an elective.

Another important change to note is that beginning with 2018-19 AY catalog, Agribusiness began using its own course prefix (AGBS) bringing greater notice to coursework specifically focusing on Agribusiness. Prior to 2018, all agribusiness courses carried an ECON course prefix which created some confusion on the part of students and outside stakeholders. The creation of the unique AGBS course prefix brings increased recognition to coursework unique to agribusiness and the agribusiness program and makes it easier for both students and external stakeholders to identify agribusiness coursework at UNK.

In 2019, the Agribusiness Minor was launched. The Agribusiness Minor is designed to complement other areas of study and reflects the desire of many employers to hire graduates with expertise in a specific discipline (i.e., Information Technology or Accounting or Management) but also have a good understanding of agriculture. The agribusiness minor has two key components:

Required courses (courses provide foundation in agribusiness and understanding of agriculture): 19 hours

AGBS 110 – Introduction to Agribusiness (2 hours)

AGBS 315 - Agribusiness Management (2 hours)

AGBS 335 – Agricultural Marketing (3 hours)

AGBS 350 – Economics of the Agricultural Sector (3 hours)

ECON 270 – Principles of Macroeconomics (3 hours)

ECON 271 - Principles of Microeconomics (3 hours)

MGT 301 – Principles of Management (3 hours)

The required courses are designed to provide foundational knowledge of economics, management, and agriculture – what makes it unique, how the sector connects to the national and global economy, and to understand the opportunities and challenges facing agribusinesses.

Electives (students must take at least 3 hours from list): 3 hours

AGBS 398 – Farm and Ranch Management (3 hours)

AGBS 415 – Agricultural Price Analysis (3 hours)

AGBS 435 - Agricultural Finance (3 hours)

ECON 320 – Intermediate Microeconomics (3 hours)

ECON 321 – Intermediate Macroeconomics (3 hours)

ECON 322 – Money and Banking (3 hours)

ECON 430 – International Economics (3 hours)

MGT 330 – International Management (3 hours)

MKT 331 – Professional Selling (3 hours)

MKT 430 – International Marketing (3 hours)

SCM 304 – Negotiation Fundamentals, Strategies & Tactics (3 hours)

The electives provide students with the opportunity to build additional knowledge in an area of interest. In addition, the electives were selected to ensure that students studying other

areas of business could complete the Agribusiness Minor without adding to their stay (time to completion) at UNK.

Student Performance Measures

It should be recognized that until 2018/19 the Agribusiness program assessment was intertwined with Economics assessment; separation of Agribusiness necessitated developing new instruments / measures unique to Agribusiness. With the move to the Marketing / Supply Chain Management department in 2018/19, the Agribusiness program began to develop an assessment plan unique to the program. During the 2018/19 AY, Agribusiness faculty completed a revised curriculum matrix to identify where learning goals were being covered and where assessment data could be collected; revised the program learning goals (outcomes); developed instruments / rubrics to measure student performance; and established benchmarks for student performance. (All assessment results are reported in WEAVE.)

The Agribusiness assessment plan / program centers around three main learning goals:

- **Goal 1.** Students completing the undergraduate Agribusiness program will demonstrate an understanding of the core knowledge of the discipline.
- **Goal 2.** Students completing the undergraduate Agribusiness program will demonstrate the ability to communicate in a manner appropriate to the discipline.
- **Goal 3.** Students completing the undergraduate Agribusiness program will demonstrate the ability to use computer software in an appropriate manner.

The curriculum matrix showed that coverage of key concepts was distributed throughout the curriculum. Students completing the Agribusiness program have the opportunity to demonstrate understanding of core knowledge of the discipline, demonstrate both written and oral communication skills, and develop skills in using computer software (PowerPoint, Excel, and Word) commonly used in businesses.

Assessment of learning goals is accomplished using course-embedded assignments and evaluated using common rubrics for written and oral communication (*see Appendix C for rubrics*). Assessment data is collected in AGBS 110, AGBS 315, AGBS 350, and AGBS 415. The following discussion details the use of instruments / rubrics and performance benchmarks for each of the learning goals.

Goal 1. Students completing the undergraduate Agribusiness program will demonstrate an understanding of the core knowledge of the discipline. Core knowledge of the discipline demonstrated by an:

- Understanding of fundamental economic concepts (comparative advantage, opportunity cost and scarcity);
- Understanding of fundamental microeconomic concepts (how firms and consumers interact in the marketplace under differing market conditions, how consumers make decisions, how firms make production and input use decisions; and the ability to conduct basic supply and demand analysis); and

3) Understanding of fundamental macroeconomic concepts (macroeconomic goals, economic growth, fiscal and monetary policy, importance of international economic relationships, and an understanding of and ability to interpret major macroeconomic data (i.e., inflation, real GDP, etc.))

Measured using a set of 10 multiple choice questions administered in AGBS 350 (Economics of the Agricultural Sector) each spring semester. The questions cover each of the three core knowledge areas: economic concepts (3 questions); microeconomic concepts (3 questions); and macroeconomic concepts (4 questions) and the overall score on the questions is used to measure achievement of student learning. Students will earn a score of 70% or better on the set of multiple-choice questions.

Measured using the "Disciplinary Characteristics," "Application of Economic Reasoning," and "Data / Empirical Analysis" rubric items from the AGBS Written Communication rubric. Student work from AGBS 315 and AGBS 415 is collected and evaluated. Students should meet the standard of at least 70% of students achieving Proficient and Advanced for each selected rubric item, where "Proficient" describes the skills of the typical student near the end of the course and "Advanced" is anything above proficient.

Goal 2. Students completing the undergraduate Agribusiness program will demonstrate the ability to communicate in a manner appropriate to the discipline.

The *ability to write* in a manner appropriate to the discipline (includes ability to find relevant agribusiness data and use it in appropriate ways and the ability to read and comprehend agribusiness literature).

Measured using the AGBS Written Communication Rubric to evaluate student work from AGBS 315 (Agribusiness Management) and AGBS 415 (Agricultural Price Analysis). Students should meet the standard of at least 70% of students achieving Proficient and Advanced for each rubric item, where "Proficient" describes the skills of the typical student near the end of the course and "Advanced" is anything above proficient.

The *ability to speak* in a manner appropriate to the discipline (includes ability to find relevant agribusiness data and use it in appropriate ways and the ability to read and comprehend agribusiness literature).

Measured using the AGBS Oral Communication Rubric to evaluate student work from AGBS 110 (Introduction to Agribusiness), AGBS 315 (Agribusiness Management), and AGBS 415 (Agricultural Price Analysis). Students should meet the standard of at least 70% of students achieving Proficient and Advanced for each rubric item, where "Proficient" describes the skills of the typical student near the end of the course and "Advanced" is anything above proficient.

Goal 3. Students completing the undergraduate Agribusiness program will demonstrate the ability to use computer software in an appropriate manner.

The ability to utilize PowerPoint presentation software in an appropriate manner.

Measured using "Slideshow Presentation" rubric item on the AGBS Oral Communication rubric. Students should meet the standard of at least 70% of students achieving Proficient and Advanced for the identified rubric item, where "Proficient" describes the skills of the typical student near the end of the course and "Advanced" is anything above proficient.

The *ability to utilize Word* processing software in an appropriate manner.

Measured using the "Use of Charts / Tables / Figures" and "Visual Appearance" rubric items on the AGBS Written Communication rubric. Students should meet the standard of at least 70% of students achieving Proficient and Advanced for each identified rubric item, where "Proficient" describes the skills of the typical student near the end of the course and "Advanced" is anything above proficient.

The *ability to utilize Excel* spreadsheet software in an appropriate manner.

Measured using the "Data / Empirical Analysis" rubric item on the AGBS Written Communication rubric. Students should meet the standard of at least 70% of students achieving Proficient and Advanced for the identified rubric item, where "Proficient" describes the skills of the typical student near the end of the course and "Advanced" is anything above proficient.

Agribusiness faculty meet, as a group - typically in early September - to discuss the assessment process and current results. Discussion focuses on the curriculum map, the rubrics (written and oral) used in assessment, and the current year assessment results. Changes to assessment plan / process are agreed upon by consensus of the Agribusiness faculty prior to being implemented.

Development of the current AGBS assessment plan began in 2018 with the move of the program to the Marketing / Supply Chain Management Department. Implementation and collection of assessment data began in 2019. The AGBS assessment results are summarized below.

Assessment of Goal 1 using the core knowledge instrument was implemented for the *first* time in Spring 2021. The 10-question instrument included questions covering each of the three core knowledge areas: economic concepts (3 questions); microeconomic concepts (3 questions); and macroeconomic concepts (4 questions) and was administered in AGBS 350 (spring 2021). The results are reported in Table 1.

Table 1. AGBS Core Knowledge Results Spring 2021 (Percent of Total Responses)

AGBS 350 (n = 16; spring):			
	Number of	Average	Percent
Category	Questions	Score	Correct
Fundamental economic concepts	3	2.38	79.3
Fundamental microeconomic concepts	3	2.06	68.7
Fundamental macroeconomic concepts	4	2.75	68.8
Overall performance	10	7.19	71.9

As shown in Table 1, the overall average score on the 10-question instrument was 71.9% and total scores ranged from 2 to 10. It is interesting to note that the low scores (i.e., below 7) were due to students not answering all of the questions. Although students were provided the opportunity to earn extra credit by answering the questions, they were not penalized for submitting incomplete work. Of

the three categories, scores were highest in fundamental economic principles (79.3% correct), followed by fundamental macroeconomic concepts (68.8% correct) and microeconomic concepts (68.7% correct).

Student written work from AGBS 315 and AGBS 415 is collected and evaluated using the common AGBS Written Communication rubric to measure student Learning Goals 1 (core knowledge), 2 (communicate appropriate to discipline), and 3 (use of software). It should be noted that while a common rubric is used to evaluate student work, the individual course assignments do not necessarily address each of the rubric items. The benchmark for performance is that at least 70% of students achieving Proficient and Advanced for the identified rubric item, where "Proficient" describes the skills of the typical student near the end of the course and "Advanced" is anything above proficient. Table 2 reports the summary results from the Written Communication Rubric.

Table 2. AGBS Written Communication Results for Fall 2019, Fall 2020 and Spring 2021: Proficient and Advanced (Percent of Total Responses by Rubric Item).

	Fall 2019	Fall 2020	Spring 2021
	AGBS 315 (n = 14)	AGBS 315 (n = 12)	AGBS 415 (n = 11)
Purpose / Thesis	57.1	83.3	36.4
Content Development	64.3	50.0	36.4
Organization	57.1	91.7	45.5
Disciplinary Characteristics	71.4	91.7	18.2
Application of Economic Reasoning	50.0	<i>86.7</i>	36.4
Data / Empirical Analysis	NA ^{1/}	NA ^{1/}	54.5
Use of Charts / Tables / Figures	NA ^{1/}	NA ^{1/}	54.5
Information Sources / Use of Citations	NA ^{1/}	NA ^{1/}	72.7
Control of Syntax and Mechanics	<i>85.7</i>	91.7	27.3
Visual Appearance	92.9	91.7	63.6

NA^{1/} not measured by assignment

Core knowledge (Goal 1) is measured using the "Disciplinary Characteristics," "Application of Economic Reasoning," and "Data / Empirical Analysis" rubric items of the Written Communication rubric applied to student written work from AGBS 315 and AGBS 415. As shown in Table 2, the stated goal of 70% of AGBS 315 students scoring Proficient and Advanced for the rubric items was met in 2020 and improvement shown between 2019 and 2020; the rubric item "Data / Empirical Analysis" was not measured by the assignment. In addition, the stated goal of 70% of AGBS 415 students scoring Proficient and Advanced was not met for the "Disciplinary Characteristics," "Application of Economic Reasoning," and "Data / Empirical Analysis" rubric items.

The ability to write (Goal 2) is also measured using the Written Communication rubric applied to student written work from AGBS 315 and AGBS 415. As shown in Table 2, the stated goal of 70% of AGBS 315 students scoring Proficient and Advanced was met for all rubric items except "Content Development" in 2020 and improvement shown between 2019 and 2020. The stated goal of 70% of AGBS 415 students scoring Proficient and Advanced was only met for the "Information Sources / Use of Citations" rubric item.

Selected items from the AGBS Written Communication rubric are also used to evaluate the ability utilize computer software (Goal 3). The ability to utilize Word processing software in an appropriate manner is measured using "Use of Charts / Tables / Figures" and "Visual Appearance" rubric items and the ability to utilize Excel spreadsheet software in an appropriate manner is measured using "Data / Empirical

Analysis" rubric items. As shown in Table 2, the stated goal of 70% of AGBS 315 students scoring Proficient and Advanced was met for the "Visual Appearance" rubric item in both 2019 and 2020; the rubric item "Use of Charts / Tables / Figures" was not measured by the assignment. The stated goal of 70% of AGBS 415 students scoring Proficient and Advanced was not met for the "Visual Appearance" or "Use of Charts / Tables / Figures" rubric items.

It should be recognized that the results reported in Table 2 are from the first-time data collection using the AGBS Written Communication rubric for an entire assessment cycle (AGBS 415 not evaluated in spring 2020 due to COVID-19). Thus, the results should be considered as the first step in determining the baseline for achievement of the learning goals. As more data become available, recommendations for any potential changes can be made.

Student presentations from AGBS 110, AGBS 315, and AGBS 415 are evaluated using the common AGBS Oral Communication rubric to measure student learning Goals 2 (communicate appropriate to discipline) and 3 (use of software). It should be noted that while a common rubric is used to evaluate student work, the individual course assignments do not necessarily address each of the rubric items. The benchmark for performance is that at least 70% of students achieving Proficient and Advanced for the identified rubric item, where "Proficient" describes the skills of the typical student near the end of the course and "Advanced" is anything above proficient. Table 3 reports the summary results from the Oral Communication Rubric.

Table 3. AGBS Oral Communication Results for Fall 2019, Fall 2020 and Spring 2021: Proficient and Advanced (Percent of Total Responses by Rubric Item).

	Fall 2019	Fall 2019	Fall 2020	Fall 2020	Spring 2021
	AGBS 110	AGBS 315	AGBS 110	AGBS 315	AGBS 415
	(n = 24)	(n = 14)	(n = 16)	(n = 13)	(n = 11)
Audience	100.0	100.0	100.0	100.0	NA ^{1/}
Information / Content	95.8	100.0	<i>81.3</i>	<i>76.9</i>	<i>75.8</i>
Analysis	NA ^{1/}	NA ^{1/}	NA ^{1/}	NA ^{1/}	<i>87.5</i>
Organization	95.8	100.0	100.0	100.0	<i>89.3</i>
Disciplinary	100.0	100.0	100.0	100.0	90.0
Characteristics					
Delivery / Mannerisms	100.0	100.0	100.0	100.0	77.4
Professionalism	95.8	100.0	100.0	100.0	90.6
Slideshow Presentation	62.5	92.9	43.8	53.8	69.7

NA¹/ not measured by assignment

The ability to speak (Goal 2) is measured using the Oral Communication rubric applied to student presentations from AGBS 110, AGBS 315 and AGBS 415. As shown in Table 3, the stated goal of 70% of students achieving Proficient and Advanced on each rubric item was achieved for all rubric items except "Slideshow Presentation." However, as would be expected, AGBS 415 students scored higher on "Slideshow Presentation" items than did AGBS 110 and AGBS 315 student indicating that students' oral communication skills are improving as they move through the program.

Selected items from the AGBS Oral Communication rubric are also used to evaluate the ability utilize computer software (Goal 3). The ability to utilize PowerPoint presentation software in an appropriate manner is measured using "Slideshow Presentation" rubric item. As shown in Table 3, the stated goal of the majority of students achieving Proficient and Advanced on the "Slideshow Presentation" rubric item

was not achieved in 2020/21 (AGBS 415 - 69.7%; AGBS 315 - 53.8%; AGBS 110 - 43.8%). However, as would be expected, AGBS 415 students scored higher on the "Slideshow Presentation" rubric item than did AGBS 110 and AGBS 315 student indicating that students' skills in using presentation software are improving as they move through the program.

It should be recognized that the results reported in Table 3 are from the first-time data collection using the AGBS Oral Communication rubric for an entire assessment cycle (AGBS 415 not evaluated in spring 2020 due to COVID-19). Thus, the results should be considered as the first step in determining the baseline for achievement of the learning outcomes. As more data become available, recommendations for any potential changes can be made.

As discussed earlier, until 2018/19 the Agribusiness program assessment was intertwined with Economics assessment; separation of Agribusiness necessitated developing new instruments / measures unique to Agribusiness. Then, the suspension of assessment in spring 2020 (due to COVID-19) has resulted in insufficient assessment data to critically evaluate how these changes have contributed to improved student learning. At this point, the Agribusiness program is still in process of establishing its baseline for student learning.

Based on the results from 2020/21 assessment cycle, the Agribusiness faculty were satisfied with the Written Communication and Oral Communication rubrics (e.g., easy to use; language appropriate), the courses in which assessment data is collected, and the overall plan. While the Agribusiness faculty felt that students are gaining skills in utilizing both Excel and Word, there was some discussion regarding whether the demonstration of those skills is being accurately measured by the current rubric item. Although this year's written communication and oral communication results only partially met established goals, the Agribusiness faculty noted that the results indicated improvement as students progressed through the program. Since the program makes extensive use of course embedded assignments in assessment, discussion focused on using specified requirements for format and content to improve alignment between faculty expectations and submitted student work. In addition, plans were made for incorporating evaluation of student's work in Excel from AGBS 110 and AGBS 415 in the assessment process.

Institutional Contributions

Agribusiness courses serve as electives for other business majors. Agribusiness faculty teach ECON courses in both the General Studies program and electives for other business majors.

Student Profile and Support Data

The agribusiness curriculum at the University of Nebraska at Kearney integrates traditional business courses with agribusiness coursework to prepare students for diverse careers within agribusiness. Information on program enrollment, graduation, placement, and internship participation is reported in Table 4.

Table 4. Agribusiness Program Enrollment, Graduation, and Placement Rates for 2018/19 – 2020/21 AY.

	2018/19 AY	2019/20 AY	2020/21 AY
Total Enrollment ^{1/} (number of AGBS students)	64	60	60
Internship Participation ^{2/} (number of students)	7	4	8
Graduation ^{1/} (number of students)	17	13	18
Placement Rate ^{2/} (percentage)	100.0	89.0	83.0

^{1/} data provided by UNK Institutional Research; 2/ data provided by CBT Career Center

As shown in Table 4, enrollment in the program has remained about 60 in the last three years. The program equips students to be well-rounded managers of any agricultural operation and has produced between 10 and 20 graduates annually. Agribusiness graduates benefit from a program with a high placement rate for employment. According to CBT Career Center, the placement rates (based on respondents to survey) for agribusiness graduates in the last three academic years have been above 80%.

Faculty Matters

UNK and CBT determine necessary qualifications for all faculty hired. Currently, there are three agribusiness faculty (Dr. Frank Tenkorang, Dr. Deborah Bridges, and Dr. Greg Nies); all agribusiness faculty qualifications are in line with the mission of CBT and the needs of the program. A 2-page abbreviated vita for each faculty member in the agribusiness program is provided in *Appendix D*.

Resource Bases

Financial resources flow to the department through the college. Funds are used to support faculty salaries, operating costs, for travel to conferences, and to maintain or improve computing and technologies. Currently, the department general fund annual budget is approximately \$792,000, the majority (96%) is devoted to wages / salaries.

With the majority of the budget devoted to wages and salaries, the department has limited discretionary funds — especially given that the department no longer receives a percentage of tuition differential dollars earned from on-line course offerings. Faculty travel funding is supported by the Dean's Office on a trip-by-trip basis, and every faculty member is guaranteed one conference attendance a year. The largest operating expenses include phone costs, copy charges, software expenditures, and office supplies.

Full-time faculty members have their maximum required teaching load. As stated earlier, agribusiness faculty cover both agribusiness courses and economics courses (results in teaching across two departments).

Although budgets have been fairly stable in recent periods, budgets remain tight and are likely to decrease in the future as UNK faces budget cuts and reduced funding from the state. The full economic impacts of the COVID-19 pandemic are not yet known but are predicted to negatively impact the institution.

In addition to financial resources provided through the College / Department, the agribusiness program also benefits from resources provided by Calvin T. Ryan Library (see Appendix E for full description of Library resources). The following information was provided by the Library:

"Calvin T Ryan Library has 303 electronic databases, and many cover the natural sciences, economics, marketing, and business information. Business Source & Academic Search Premier from Ebsco, Mergent Online, JSTOR, Standard & Poor's, Value Line, EconLit, IBISWorld, NexisUNI, MarketLine, Reference U.S.A., Census of Agriculture, Hein Online, and U.S. Major Dailies could be of particular interest to the Department of Agribusiness. As a member of the University of Nebraska Consortium of Libraries (UNCL), UNK has access to the five major journal packages: Sage Journals, ScienceDirect by Elsevier, Wiley Online Library, Springer, and Taylor & Francis.

Historically, the Library has allocated funds to departments based on the number of credit hours produced by the department in the previous academic year. However, for the past several years, department faculty members have been able to request purchase of materials as needed. As of July 2021, there are over 250,000 print titles and 228,000 e-book titles in the collection."

Program Comparisons

The list of peer institutions used for program comparisons was compiled from the list of peer schools for AACSB Accreditation, UN Board of Regents, and the Coordinating Commission. After removing duplications across the three lists, each school was examined to determine if they offered an agribusiness program. The resulting list was further categorized into schools offering a degree in agriculture with an emphasis (major) in agribusiness; schools offering a business degree with agribusiness emphasis; and schools offering a degree in agribusiness. The peer schools and degrees offered are presented in Table 5.

Table 5. Peer Schools for UNK's Agribusiness Program

School	Degree Program
University of Central Missouri (UCM)	B.S. Agricultural Science, Agribusiness Management
Western Illinois University (WIU)	B.S. Agriculture, Agribusiness Option
Murray State University (Murray SU)	B.S. Agriculture, Agribusiness Track
Morehead State University (Morehead SU)	B.S. Agricultural Sciences, Agribusiness Track
Truman State University (TSU)	B.S. Agricultural Science, Agribusiness Minor
Sam Houston State University (SHSU)	B.S. Agribusiness
University of Tennessee at Martin (UT Martin)	B.S. Agribusiness
University of Nebraska Lincoln (UNL - CASNR)	B.S. Agribusiness (offered through College of
	Agricultural Sciences and Natural Resources)
	Multiple tracks / options offered within Agribusiness
	degree, including Agribusiness Management Option,
	Commodity Marketing and Merchandising Option,
	and Agricultural Banking and Finance Option
Doane University	B.A. (or B.S.) Agribusiness (offered through College of
	Business)
Chadron State College	B.A. Business Administration, Agribusiness Minor
	(Emphasis)
Wayne State College	B.S. Business Administration, Agribusiness Emphasis
University of Nebraska Lincoln (UNL – CoB)	B.S. Business Administration, Agribusiness Emphasis
	(offered through College of Business)

A review of each peer's school curriculum revealed that no one school has a program identical to UNK's Agribusiness program nor are the curriculums identical across all peer institutions. Given this, course catalog descriptions were evaluated to determine if the content coverage at peer institutions was similar to that of UNK's Agribusiness curriculum. The comparison focused on looking for similarities with the required coursework at UNK. However, it should also be noted that when specific content was not required in a peer's school curriculum, that content was often still available through elective courses.

Comparison of UNK's curriculum to peer schools offering a degree in agriculture with an emphasis / major in agribusiness is presented in Table 6.

Table 6. Comparison of UNK's Agribusiness Curriculum to Peer Schools Offering B.S. Agriculture, Agribusiness Emphasis / Track.

			Murray	Morehead	
UNK requirement:	UCM	WIU	SU	SU	TSU
Principle Macro (ECON 270)	Х	X	Х		Х
Principle Micro (ECON 271)	Х	Х	Х		Х
Exploring Business (BSAD 100)	Х	Х	Х		Χ
Professional Readiness (BSAD 400)		X	X		
Accounting I (ACCT 250)	Χ	X	X	X	
Accounting II (ACCT 251)		X			
Finance (FIN 308)		X			
Marketing (MKT 300)					
Management (MGT 301)					
Business Communication (BSAD 295)	Χ	X			
Business Statistics (MGT 233)	X		Х		
Business Law (ACCT 311)					
Business Ethics (MGT 493)					Χ
Strategy and Policy (MGT 495)					
Intro Agribusiness (AGBS 110)		X			
Agribusiness Management (AGBS 315)		Х	Х	х	Х
Agricultural Marketing (AGBS 335)	Х	Х	Х	Х	Х
Economics of Agricultural Sector (AGBS 350)	X		Х	х	
Farm and Ranch Management (AGBS 398)	Х		Х	х	
Agricultural Finance (AGBS 435)	Х		Х		
Intermediate Micro (ECON 321)					
Intermediate Macro (ECON 321) or Money and Banking (ECON 322)					

All of the peer schools listed in Table 6 offer a degree in agriculture / agricultural sciences with an emphasis / major in agribusiness. All of these schools have a required core focusing on the production side of agriculture (e.g., livestock and crops) that includes coursework in areas such as agronomy, cropping systems, livestock systems, animal science, and crop science; most of the above institutions also have a University farm and/or access to production facilities which facilitates the delivery of the production agriculture core. As shown in the table, these programs offer course content in many of the same key business areas (e.g., principles of microeconomics, macroeconomics, communication, accounting) and agribusiness areas (e.g., ag marketing, agribusiness management, farm and ranch management) as does UNK. Coursework included in the business core at UNK (e.g., management, marketing, business communication) is offered as electives at these peer institutions. In addition, many of these peer schools offer a capstone experience with an agricultural focus and coursework in natural

and resource economics and/or international agricultural trade rather than the required intermediate economics at UNK.

Table 7 presents the comparison of UNK's curriculum to peer schools offering a degree in agribusiness.

Table 7. Comparison of UNK's Agribusiness Curriculum to Peer Schools Offering B.S. (or B.A.) Agribusiness.

Agribusiness.			UNL -	
UNK requirement	SHSU	UT Martin	CASNR	Doane
Principle Macro (ECON 270)	X	X	X	2 5 4 1 1 5
Principle Micro (ECON 271)	Х	Х	Х	
Exploring Business (BSAD 100)	Х		Х	
Professional Readiness (BSAD 400)			Х	
Accounting I (ACCT 250)	Χ	Х	Χ	Х
Accounting II (ACCT 251)		Х	Χ	
Finance (FIN 308)				
Marketing (MKT 300)			Х	
Management (MGT 301)			Χ	
Business Communication (BSAD 295)				
Business Statistics (MGT 233)				
Business Law (ACCT 311)			Χ	
Business Ethics (MGT 493)				
Strategy and Policy (MGT 495)	X			
Intro Agribusiness (AGBS 110)				
Agribusiness Management (AGBS 315)	Х		Х	Х
Agricultural Marketing (AGBS 335)	Х	Х	Х	
Economics of Agricultural Sector (AGBS 350)	Х	Х		Х
Farm and Ranch Management (AGBS 398)	Х	Х		Х
Agricultural Finance (AGBS 435)		Х	Х	
Intermediate Micro (ECON 321)				
Intermediate Macro (ECON 321) or Money				
and Banking (ECON 322)				

All of the peer schools listed in Table 7 offer a degree in agribusiness. With the exception of Doane, all of these schools have a required core focusing on the production side of agriculture (e.g., livestock and crops) that includes coursework in areas such as agronomy, cropping systems, livestock systems, animal science, and crop science. As shown in the table, these programs offer course content in many of the same key business areas (e.g., principles of microeconomics, principles of macroeconomics, accounting) and agribusiness areas (e.g., ag marketing, agribusiness management, farm and ranch management) as does UNK. In terms of coursework included in the business core at UNK (e.g., management, marketing, business communication), courses in these areas are offered as electives at these peer institutions. In addition, many of these peer schools offer a capstone experience with an agricultural focus and coursework in agricultural law, natural and resource economics, and/or international agricultural trade.

Comparison of UNK's curriculum to peer schools offering a degree in business administration with an emphasis in agribusiness is presented in Table 8.

Table 8. Comparison of UNK's Agribusiness Curriculum to Peer Schools Offering B.S. or B.A. in Business Administration with an Emphasis in Agribusiness.

	Chadron	Wayne	
UNK requirement	State	State	UNL - CoB
Principle Macro (ECON 270)	Х	Х	Х
Principle Micro (ECON 271)	Х	Х	Х
Exploring Business (BSAD 100)			X
Professional Readiness (BSAD 400)			X
Accounting I (ACCT 250)	Х	Χ	X
Accounting II (ACCT 251)	Х	Χ	X
Finance (FIN 308)	Х		
Marketing (MKT 300)	Х	Χ	X
Management (MGT 301)	Х	Χ	X
Business Communication (BSAD 295)	X	Χ	
Business Statistics (MGT 233)	X	Χ	X
Business Law (ACCT 311)	X	Χ	X
Business Ethics (MGT 493)		Χ	
Strategy and Policy (MGT 495)	Х	Χ	
Intro Agribusiness (AGBS 110)			
Agribusiness Management (AGBS 315)	Х		
Agricultural Marketing (AGBS 335)		Χ	
Economics of Agricultural Sector (AGBS 350)	Х	Χ	
Farm and Ranch Management (AGBS 398)		Χ	Х
Agricultural Finance (AGBS 435)			
Intermediate Micro (ECON 321)			
Intermediate Macro (ECON 321) or Money and Banking (ECON 322)			

All of the peer schools listed in Table 8 offer a degree in business administration with an emphasis area in agribusiness. As would be expected, all of these programs offer course content in the same key business areas (e.g., principles courses in microeconomics, macroeconomics, accounting, management, marketing, business communications) as UNK. However, these programs differ from UNK in that coursework in key agribusiness areas (e.g., ag marketing, agribusiness management, farm and ranch management) is offered as electives rather than required. All of these schools also have elective course work focusing on the production side of agriculture (e.g., livestock and crops) that includes coursework in areas such as agronomy, cropping systems, livestock systems, animal science, and crop science. In addition, many of these peer schools offer coursework in agricultural law, natural and resource economics, and/or international agricultural trade.

Comparing UNK's Agribusiness curriculum to peer institutions provides valuable insight into the strengths of our program as well as identifying possible areas of improvement. One of the primary strengths of UNK's agribusiness program is its solid foundation in basic business (e.g., economics,

accounting, finance, marketing, management, and communication) that is integrated with courses specifically focused on key areas of agribusiness (e.g., ag marketing, ag finance, agribusiness management, ag price analysis, etc.). While UNK's program does provide coverage of key aspects of agribusiness, there are areas that more in-depth focus or coursework would benefit our students. For example, currently both international trade and agricultural policy are covered in AGBS 350 (Economics of the Agricultural Sector). However, many of our peer institutions address agricultural policy and international agricultural trade utilizing separate courses. In addition, many of our peer institutions offer coursework in agricultural law an area that UNK's curriculum does not currently address. Currently, the business capstone course, MGT 495 (Administrative Strategy and Policy), also serves as the Agribusiness program's capstone course. However, many of our peer institutions have a capstone course that has an agricultural focus.

Future Direction

As a discipline, Agribusiness has more in common with Economics than it does with Marketing and/or Supply Chain Management. Agribusiness faculty have the academic qualifications to teach both economics courses and agribusiness courses, which they currently do. Relocating the Agribusiness program to a department that also houses the Economics program would facilitate scheduling of / instructor assignment for both AGBS and ECON courses, as well as providing a foundation to build on the commonalities between the disciplines.

Comparison of UNK's Agribusiness programs to peer institutions indicate course work that could be incorporated to strengthen the program. Courses in International Agriculture / Agricultural Trade, Natural Resource Economics, and Agricultural Law are areas that would benefit our students. Implementation of a capstone course with an agribusiness focus could also benefit our students.

The Agribusiness program makes full use of the common-business core within CBT; the size of that common core combined with limits on program hours imposed by UNK policy makes it difficult to add new courses to the program. Additionally, until 2018/19 the Agribusiness program assessment was intertwined with Economics assessment; separation of Agribusiness necessitated developing new instruments / measures unique to Agribusiness. Then, the suspension of assessment last year (due to COVID-19) has resulted in insufficient assessment data to critically evaluate how these changes have contributed to improved student learning. At this point, the Agribusiness program is still in process of establishing its baseline for student learning.

The Agribusiness program makes full use of the common-business core within CBT. At present, CBT is reexamining the common core. Once that review is completed, there may be programmatic changes applicable to the Agribusiness program.

While the agribusiness program has not grown significantly during the study period (2018/19 – 2020/21 AY), enrollment in the program has remained stable and it does have strong growth potential. The new Agribusiness Minor is expected to increase enrollments in agribusiness courses. Currently, students are able to complete most other minor programs in the college (CBT) online; hence, in the future, offering the Agribusiness Minor online will make the program more accessible and attractive to students in other business and college programs. Also, CBT business programs are currently working on a 2+2 agreement with community colleges in Nebraska. The Agribusiness program could benefit from similar agreements in the future as some community colleges and the Nebraska College of Technical Agriculture offer agricultural production courses that UNK lacks the resources to offer.

Finally, the Agricultural Business Association (student organization) had been very active before the onset of COVID-19; the field trips and guest speakers at club meetings that engaged students have ceased. With the expected reduction in COVID-19 cases, relaxation of restrictions on gathering and travel, and additions of agribusiness faculty, the club is looking forward to returning to pre-COVID activity levels.

Appendix A:

Four-year Suggested Schedule for

Agribusiness Comprehensive Major

Agribusiness Comprehensive Major Suggested Class Rotation Schedule

Freshman (Fall)	15 hrs	Freshman (Spring)	16 hrs
BSAD 100 Exploring Business	1	MATH 120 Finite Math or MATH 123 Applied Calculus I	3
First Year Seminar (LOPER 1 GS)	3	Visual or Performing Arts (LOPER 5 GS)	3
ENG 101 or ENG 102 (LOPER 2 GS)	3	Humanities (LOPER 6 GS)	3
SPCH 100 Fundamental of Speech Communication (LOPER 3 GS)	3	ECON 270 Macro or ECON 271 Micro (LOPER 7 GS)b/	3
MATH 102 College Algebra LOPER 4 GS) ^{a/}	3	Natural Science with lab (LOPER 8 GS) ^{c/}	4
AGBS 110 Intro to Agribusiness (F)	2		

^{a/}Students with adequate math preparation should take MATH 120 or MATH 123

c/Take one Natural Science GS with lab (CHEM 145 or 160/160L or BIOL 103 or 105 or 106)

Sophomore (Fall)	15 hrs	Sophomore (Spring)	15 hrs
MGT 233 Business Statistics	3	Civic Competency and Engagement (LOPER 9, GS)	3
ECON 270 Macro or ECON 271 Micro (LOPER 7 GS)b/	3	ACCT 251 Principles of Accounting II	3
ACCT 250 Principles of Accounting I	3	MKT 300 Principles of Marketing	3
MGT 301 Principles of Management	3	BSAD 295 Business Communications	3
Free Elective	3	Free Elective	3

b/ECON 270 and ECON 271 are both Social Sciences (LOPER 7 GS) courses

Junior (Fall)	15 hrs	Junior (Spring)	15 hrs
AGBS 335 Ag Marketing (F)	3	AGBS 415 Ag Price Analysis (S)	3
AGBS 315 Agribusiness Management (F)	2	AGBS 350 Econ of Ag Sector (S)	3
ECON 320 Intermediate Micro	3	ECON 321 Intermediate Macro or ECON 322 Money & Banking	3
ACCT 311 Business Law	3	Respect for Human Diversity (LOPER 10, GS)	3
FIN 308 Principles of Finance	3	Ag Major Elective ^{e/}	3
BSAD 400 Professional Readiness	1		

e/Consult your Catalog for a list of Agribusiness Major Elective Component courses

Senior (Fall)	15 hrs	Senior (Spring)	14 hrs
AGBS 398 Farm and Ranch Management (F)	3	AGBS 435 Ag Finance (S)	3
MGT 493 Social Responsibilities of Business: Issues and Ethics	3	MGT 495 Administrative Strategy and Policy	3
Ag Major Elective ^{e/}	3	Ag Major Elective ^{d/}	2
Free Elective	3	Free elective	3
Free Elective	3	Free elective	3

e/Consult your Catalog for a list of Agribusiness Major Elective Component courses

b/ECON 270 and ECON 271 are both Social Sciences (LOPER 7, GS) courses

Appendix B:

AGBS Catalog Course Descriptions

(from undergraduate catalog \underline{link})

AGBS 110 – Introduction to Agribusiness (2 credit hours). This course focuses on introducing students to the agribusiness sector of the U.S. and developing an understanding of its importance. The agribusiness sector encompasses more than just production agriculture, but also includes the firms that produce and sell goods and services (inputs) to the farming and ranching sector and the firms that handle and process agricultural commodities from the farm gate to the consumer plate. The agribusiness sector provides a diverse set of career paths and opportunities for students. This course is course is designed to introduce students the opportunities available in agribusiness and to foster skill development in the basic oral and written communication skills required in the agribusiness field.

AGBS 315 – Agribusiness Management (2 credit hours). This course focuses on the role and function of management in the agribusiness sector. The agribusiness sector is diverse and includes firms producing agricultural products, firms providing inputs and services to agricultural producers and all the firms that handle and process agricultural goods from the farm gate to the consumer's plate. This course builds upon the basic management principles and skills learned in MGT 301 by exposing students to the size and scope of the agribusiness sector, the organizational design of the types of businesses common in agriculture (e.g., cooperatives, sole-proprietorship, family owned-corporations, etc.) and the challenges managers face in these business environments. Prerequisite: ECON 270 and ECON 271 and MGT 301

AGBS 335 – Agricultural Marketing (3 credit hours). An analytical and descriptive study of agricultural markets and marketing systems. This course will provide the student with knowledge of agricultural price determination, the use of futures and options for price discovery and risk management, and marketing institutions in agriculture. Prerequisite: ECON 271

AGBS 350 – Economics of the Agricultural Sector (3 credit hours). All agribusinesses are impacted by factors external to the firm, such as weather, agricultural policy, macroeconomic events, economic policy, and changes in the legal environment. This course is designed to show how the agricultural and non-agricultural sectors are integral parts of the economy and to provide students with an understanding of the current economic environment, how this may change in the future, and how these factors impact agricultural production and agribusinesses. Course is required in the Agribusiness program but also serves as an elective for other business and non-business degree programs. Prerequisite: ECON 270 and ECON 271

AGBS 398 – Farm and Ranch Management (3 credit hours). This course focuses on the problems faced by farm, ranch, and agribusiness managers, and the decision-making process used in achieving the business's objective of increasing profit or some other desired goal. Focusing on the application of economic principles to the decision making process, this course provides students with experience in decisions of how much, what, and how to produce; examination of how financial statements and budgeting techniques are used in decision making; and the application of risk analysis and management of risk through investment planning and analysis. Prerequisite: ECON 271 and ACCT 250

AGBS 415 – Agricultural Price Analysis (3 credit hours). This course focuses on the role of prices and pricing mechanisms in coordinating activities between the vertical levels of the agricultural marketing system. Focusing on the application of economic principles in the price discovery process, this course is designed to foster skill development in the basic quantitative methods used in market and price analysis and price forecasting and for students to gain an understanding of the different factors that influence prices in the agricultural sector and the alternative pricing arrangements that exist for agricultural commodities. Prerequisite: AGBS 335 and MGT 233 or STAT 241

AGBS 435 – Agricultural Finance (3 credit hours). Financial management in agriculture is concerned not only with the acquisition and use of financial resources, but also the protection of equity capital from various sources of risk. This course focuses on the financial requirements of farms, ranches, and agribusiness firms, and the decision-making process used in evaluating the credit needs and repayment capacity from both the manager's and lenders perspectives. Focusing on the application of economic principles in making financial decisions, this course provides students with experience in evaluating risk by analyzing financial statements, cash flow budgets, and capital budgets, an understanding of the sources of agricultural credit, and acquaints the student with some of the special issues associated with financial management in the agricultural environment. Prerequisite: AGBS 398 and FIN 308

AGBS 475 – Agribusiness Internship (1 - 8 credit hours). A work experience program planned for students preparing for employment in agricultural business. The learning situation is organized and supervised cooperatively by the academic department, CBT Career Center, and personnel of selected agribusiness. Work experience includes an acceptable type of wage earning employment in agribusiness industry approved by the coordinator. Total Credits Allowed: 8.00. Prerequisite: Minimum GPA of 2.5 and ECON 270 and ECON 271 and additional 6 hours of 300/400 level AGBS and ECON courses.

AGBS 499 – Independent Study and Research in Agribusiness (1 - 6 credit hours). Individual research under the supervision of a faculty member of the department and approved by the Department Chairman. Topics to be investigated may be tailored to fit the needs of the student. Total Credits Allowed: 6.00

Appendix C:

AGBS Assessment Rubrics

(Written and Oral)

AGBS Written Communication Rubric: Evaluators are encouraged to assign "Does not meet criteria" to any work that does not meet Beginning level performance, is plagiarized, off topic, or does not meet specifications.

Item	Does not meet	Beginning	Developing	Proficient ^{1/}	Advanced
Purpose for Writing (Thesis Statement)		Purpose unclear or identifiable; no attempt to limit topic.	Purpose is stated but not clear or fully defined; some attempt to limit topic.	Purpose stated and defined but not sustained through discussion; attempt to limit topic is demonstrated	Purpose clearly stated, defined and sustained throughout discussion; topic effectively limited.
Content Development		Topic is vague or undefined; unclear how topic will be covered. Information not relevant to topic, with no depth or quality. Conclusions irrelevant relative to the body of the paper. Discussion is too lengthy.	Topic is not clearly defined; unclear how topic will be covered. Ideas not completely developed. Conclusions loosely connected to the body of the paper. Discussion not concise.	Topic is clear with adequate information; identifies somewhat how the topic will be covered. Ideas developed adequately. Body of paper provides limited support for conclusions. Discussion is of acceptable length.	Topic is clearly identified and identifies how it will be covered. Subject is adequately detailed. Information is accurate. Ideas are thoroughly developed. Conclusions well supported by the body of the paper. The discussion is concise.
Organization		No introductory statement. Discussion loses focus. Points lack development and support. No conclusion.	Limited introductory and concluding statements. Limited supporting data; points not completely developed. No transitions between ideas.	Includes introductory and concluding statements. Some supporting data is present. Limited transitions between ideas.	Discussion is coherent. Ideas are well-developed. Points are justified by supporting data. Transition between ideas is effective.
Disciplinary Characteristics		Word choice is not appropriate. Vocabulary lacks understanding and knowledge of discipline.	Word choice is inappropriate at times. Demonstrates adequate, but not complete, knowledge of field.	Word choice is appropriate but not as articulate. Demonstrates adequate knowledge of field.	Word choice appropriate to discipline. Vocabulary shows understanding. Demonstrates knowledge of field.
Application of Economic Reasoning		Incorrect, inappropriate, or no use of economic concepts.	Use of economic concepts not well explained, or the concepts used not the best to explain the topic at hand	Correct and appropriate use of economic concepts identified but explanation unclear.	Correct and appropriate use of economic concepts to form inferences or conclusions about the topic
Data / Empirical Analysis		No data or inaccurate data with no sources identified. Unclear or unidentifiable descriptions of type(s) of analyses used.	Presents data with no analysis; sources, purpose, and use not clearly stated. Type(s) of analyses not well defined; vague description.	Collection and presentation of relevant data in the work. The sources, purpose, and use are identified. Type(s) of analyses identified but descriptions unclear and/or analysis limited / incomplete.	Collection, analysis and presentation of relevant data in the work. The sources, purpose, and use are clearly stated. Provides a clear and concise description of applicable type(s) of analyses used.
Use of Charts / Tables / Figures		Graphic representation is misleading and inaccurate or does not augment the data. No source of data for graphic listed.	Graphic represents data appropriately, but exact numerical data not easily identifiable or understandable. Incomplete information for source of data in graphic.	Graphic(s) accurately represents data in an appropriate manner for the type of data displayed. Inconsistencies in formatting, labeling, and/or listing sources of data for graphic(s).	Graphic(s) accurately represents data in an appropriate manner for the type of data displayed. Formatted and labeled correctly. Source of data for graphic listed.

Information Sources / Use of Citations	Inappropriate number of qualified sources cited; one type of source utilized. Failure to recognize other's work and/or no citations provided in discussion.	Marginally appropriate number of qualified sources used but types of sources is limited; recognition of other's work provided somewhat correctly but not consistently through citations.	Appropriate number of qualified sources used and cited appropriately but types of sources utilized are limited. Some inconsistencies in citation format.	Appropriate number of qualified sources used and cited appropriately; multiple types of sources utilized. Citation format followed correctly and consistently
Control of Syntax and Mechanics	Uses language that sometimes impedes meaning because of errors in usage.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses straightforward language that generally conveys meaning to readers. The language in the assignment has few errors.	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.
Visual Appearance	Document is not formatted	Document is formatted inconsistently and lacks appeal	Some inconsistencies in formatting but document is visually appealing	Document is formatted correctly and is visually appealing

¹/Note: The category "Proficient" describes the skills of the <u>typical</u> student near the end of the course. Advanced is anything above proficient.

AGBS Oral Communication Rubric: Evaluators are encouraged to assign "Does not meet criteria" to any work that does not meet Beginning level performance, is plagiarized, off topic, or does not meet specifications.

Item	Does not meet	Beginning	Developing	Proficient ^{1/}	Advanced
Content		Information not relevant to topic, with no depth or quality. Presentation is too lengthy.	Topic is not clearly defined. Ideas not completely developed. Presentation not concise	Topic is clear; adequate information of average quality and satisfactory depth. Ideas developed adequately. Presentation is of acceptable length.	Topic is clearly identified. Subject is adequately detailed. Information is accurate / complete (consistent with assignment). Ideas are thoroughly developed. The presentation is concise.
Analysis		No stated purpose. Does not use statistical/factual information or any reasoning. Does not distinguish between fact and opinion. Ambiguous.	Purpose not clearly stated. Distinguishes between fact and opinion but has little statistical information. Does not clearly support conclusions/solutions. Reasoning appears faulty.	Purpose stated. Distinguishes between fact and opinion and has some statistical information. Has support for conclusions that are logical but not complete. Reasoning not fully developed.	Purpose clearly stated. Assumptions identified. Distinguishes between fact and opinion, uses factual/statistical information, and avoids ambiguities. Conclusions are logical, valid and sound. Reasoning is logical, internally consistent, and fully developed.
Organization		No opening statement. Loses focus, does not manage time well. No conclusion.	Limited opening and closing remarks. Points not completely developed. No transitions between ideas.	Includes opening and closing remarks. Some supporting data is present. Limited transitions between ideas.	Presentation is coherent. Ideas are well-developed. Points are justified by supporting data. Transition between ideas is effective.
Disciplinary Characteristics		Word choice is not appropriate. Vocabulary lacks understanding and knowledge of discipline.	Word choice is inappropriate at times. Demonstrates adequate, but not complete, knowledge of field.	Word choice is appropriate but not as articulate. Demonstrates adequate knowledge of field.	Word choice appropriate to discipline. Vocabulary shows understanding. Demonstrates knowledge of field.
Delivery		Makes excuses, slang/poor word choice, little or no eye contact and gestures. Hard to understand. Used notes all the time. Does not answer questions effectively.	Limited eye contact and gestures. Articulation not as clear. Heavy reliance on notes. Language appropriate. Q & A time, but answers incomplete.	Eye contact and gestures are adequate. Articulation not as clear. Notes are over used. Language appropriate. Q & A time with acceptable answers to questions.	Eye contact, smooth gestures, volume, expressions, pace indicate confidence. Clear articulation and pronunciation; filler words not distracting. Student knows material and does not over use notes. Appropriate language used. Responds to questions effectively.
Professionalism		Not professionally dressed. Poor posture, shifting, leaning on podium, trouble running the equipment	Meets minimum dress standard. Minor distracting mannerisms. Minor equipment problems.	Meets minimum dress standard. No distracting mannerisms. Good use of equipment.	Well dressed, treats audience professionally. Good posture and presence. Excellent use of equipment
Slideshow Presentation		Sloppy, unprofessional, difficult to read, not relevant. Errors detract from information.	Some inconsistency in slide design, some slides too wordy, and errors noted.	Well designed, readable, relevant. Slides are acceptable and easy to read. Only minor errors.	Slides are attractive and easy to read. The slides are mechanically correct (capitalization, punctuation, and spelling). Slides are neat and presentable.

¹/Note: The category "Proficient" describes the skills of the <u>typical</u> student near the end of the course. Advanced is anything above proficient.

Appendix D:

AGBS Faculty Vita

Frank A. Tenkorang

University of Nebraska at Kearney Marketing, Agribusiness & Supply Chain Management (308) 865-8573 Email: tenkorangf1@unk.edu

Education

Certificate, Wharton - University of Pennsylvania, 2020; Major: Business Analytics Specialization PhD, Purdue University, 2006; Major: Agricultural Economics MS, University of Wyoming, 2002; Major: Agricultural Economics BSc (Hons), University of Ghana, 1996; Major: Agriculture

Professional Positions

Academic - Post-Secondary

Department Chair, Accounting, Finance, & Economics, University of Nebraska at Kearney. (2019 - Present).

Professor, University of Nebraska at Kearney. (2016 - Present).

Interim Department Chair, Family Studies, University of Nebraska at Kearney. (2018 - 2019).

Department Chair, Economics, University of Nebraska at Kearney. (2011 - 2018).

Associate Professor, University of Nebraska at Kearney. (2011 - 2016).

Interim Department Chair, Economics, University of Nebraska at Kearney. (2010 - 2011).

Assistant Professor, University of Nebraska at Kearney. (2006 - 2011).

Professional Memberships

Agricultural and Applied Economics Association. (2005 - Present).

Teaching Experience: University of Nebraska at Kearney

AGBS 335, Agricultural Marketing
AGBS 350, Econ of Ag Sector
AGBS 398, Farm and Ranch Management
AGBS 415, Ag Price Analysis, 3 courses.
BSAD 895, Integrative Capstone Exp
ECON 100, Contemp Econ Issues
ECON 188, GS Portal

ECON 300, Research Methods in Econ & Bus,
ECON 320, Econ-Interm Micro
ECON 365, Bus Analytics & Dec Making
ECON 485, Senior Seminar
ECON 499, Independent Study and Research
ECON 850, Managerial Econ

Refereed Journal Articles

ECON 270, Prin of Econ-Macro ECON 271, Prin of Econ-Micro

Tenkorang, F. A., Ziwoya, F. O. (2020). Measuring Attitudes Toward Ethanol Production and Use: A Case Study of Nebraska. *Great Plains Research*, *30*(1), 1-13. https://muse.jhu.edu/issue/42167

Dority, B. L., Tenkorang, F. A., Ujah, N. U. (2019). Availability of Private Credit - Does Culture Matter? *Studies in Economics and Finance*, *36*(2), 207-233.

Tenkorang, B., Tenkorang, F. A., Ujah, N., Ziwoya, F. O. (2016). Default in Lending Potential of Small and Medium Enterprises: the Case of Ghana. *African Journal of Accounting, Economics, Finance and Banking Research, 10,* 18-29. http://globip.com/africanjournal.htm

Dority, B. L., Tenkorang, F. A. (2016). Ethanol Production and Food Price: Simultaneous Estimation of Food Demand and Supply. *Agricultural Economics Review*, *17*(1), 97-106.

Bridges, D. E., Tenkorang, F. A. (2015). Implications of Increased Ethanol Production on

- Nebraska Hay Production: An Initial Investigation. *Economics & Business Journal: Inquiries & Perspectives*, 6(1). http://nebeconandbus.org/journal/paperpage.htm
- Tenkorang, F. A., Dority, B. L., Bridges, D. E., Lam, E. (2015). Relationship between Ethanol and Gasoline: AIDS Approach. *Energy Economics*, *50*, 63-69.
 - http://www.sciencedirect.com/science/article/pii/S0140988315001425
- Bridges, D., Tenkorang, F. A. (2009). Multi-Crop Acreage Response The Impact of the 1996 Farm Bill. *Journal of Business and Behavioral Sciences*, *21*(1), 39-50. http://www.asbbs.org/files/2009/Volume 21.1 Fall 2009.pdf
- Tenkorang, F. A., Lowenberg-DeBoer, J. (2009). Forecasting Long-term Global Fertilizer Demand. *Nutrient Cycling in Agroecosystems*, *83*(3), 233-247. http://www.springerlink.com/content/a25q8882r66l86n3/?p=fa746d5fdca94a53bed199dc288d a148&pi=3

Encyclopedia Entry

Tenkorang, F. A., Bridges, D. E. (2015). Nebraska, sprinkled with corn and ethanol. *Just Plains Folks: Studies of the People of the Great Plains*. Just Plains Folks: Studies of the People of the Great Plains.

Presentations Given

- Tenkorang, F. A. (Author & Presenter), Bridges, D. E. (Author). 60th Mountain Plains Business Conference, 2019, "Oligopsony Power in the U.S. Hog Market," Mountain Plains Business Conference, Brookings, SD. (October 2019).
- Tenkorang, F. A. (Author), Su, Y. (Author & Presenter), Ziwoya, F. O. (Author & Presenter). 2019 AAEA Annual Meeting, "Determinants of Consumer Attitudes toward Fuel Ethanol in the State of Nebraska," Agricultural & Applied Economics Association (AAEA), Atlanta, GA. (July 2019).
- Tenkorang, F. A., Bridges, D. E. AMERICAN SOCIETY OF BUSINESS AND BEHAVIORAL SCIENCES PROGRAM OF 22 nd ANNUAL CONFERENCE, "The Impact of Nebraska Ethanol Production on Corn and Soybean Prices Volatility," Las Vegas, NV. (February 23, 2015).
- Bridges, D. E., Tenkorang, F. A., "Implications of Increased Ethanol Production on the Variability of Corn Prices: Does Size Matter?," American Society of Business Behavioral Sciences, Las Vegas, NV. (February 2013).
- Bridges, D., Tenkorang, F., "An Analysis of Increased Ethanol Production on Nebraska Hay Production," American Society of Business and Behavioral Sciences, Las Vegas, Nevada. (2012).

University Service

Several department and college committees

Graduate Council - Member

Committee Chair, Peter Kiewit Student Entrepreneurial Award and the Walter Scott Entrepreneurial Business Award. (August 2016 - May 2018).

Committee Member, CBT:BD Assurance of Learning Committee. (September 1, 2009 - August 31, 2010).

Professional Service

Reviewer, Journal Article, Precision Agriculture. (March 2019 - Present).

Member, Mountain Plains Management Association Board. (2018 - Present).

Reviewer, Journal Article, Energy Strategy Reviews. (April 2017 - Present).

Reviewer, Ad Hoc Reviewer, Transportation Research Part D. (April 2020 - May 2020)

DEBORAH E. BRIDGES, PH.D. Professor, University of Nebraska-Kearney

Department of Marketing/Agribusiness/SCM University of Nebraska at Kearney

(308) 865 - 8044 bridgesd@unk.edu

EDUCATION

- 1994 Ph.D. in Agricultural Economics, Washington State University.
- 1989 M.S. in Agricultural Economics, University of Wyoming.
- 1984 B.S. in Agricultural Business, with a broad background in Animal Science, University of Wyoming.

ADMINISTRATIVE EXPERIENCE

Director of General Studies, University of Nebraska at Kearney (May 2014 - May 2019).

Faculty Assistant to the Senior Vice Chancellor of Academic and Student Affairs (SVCASA), University of Nebraska at Kearney (January 2007 – December 2011).

Chair, Department of Economics, University of Nebraska at Kearney (January 2005 – December 2006).

TEACHING EXPERIENCE

Professor (promoted in 2009)/ Associate Professor (promoted in 2002)/ Assistant Professor, University of Nebraska at Kearney (August 1997 to present).

Economics courses: Contemporary Economic Issues (ECON 100); Principles of Microeconomics (ECON 271); Principles of Macroeconomics (ECON 270); Research Methods in Business and Economics (ECON 300); Senior Seminar (ECON 485); Intermediate Macroeconomics (ECON 321)

Agribusiness courses: Introduction to Agribusiness (AGBS 110); Agribusiness Management (AGBS 315), Farm and Ranch Management (AGBS 398); Agricultural Finance (AGBS 435); Agricultural Price Analysis (AGBS 415) and Economics of the Agricultural Sector (AGBS 350).

REFEREED JOURNAL ARTICLES

- Lear, J. L., Bridges, D. E., Landholm, B. S., Hodge, K. A. (2019). Teaching Strategies That Promote Learning for the 21st Century Student. NACTA Journal, 63(2), 127-132.
- Bridges, D., Tenkorang, F. A. (2015). "Implications of Increased Ethanol Production on Nebraska Hay Production: An Initial Investigation." *Economics and Business: Inquiries and Perspectives (NEBA)*, Volume 6, Number 1 (available on-line at: http://nebeconandbus.org/journal/paperpage.htm).
- Tenkorang, F. A., Dority O'Callaghan, B. L., Bridges, D., Lam, E. (2015). "Relationship between Ethanol and Gasoline: AIDS Approach." *Energy Economics*, *50*, 63-69.
- Bridges, D., Tenkorang, F.A. (2009). "Multi-Crop Acreage Response the Impact of the 1996 Farm Bill." *Journal of Business and Behavioral Sciences*, 21(1): 39-50.

PRESENTATIONS

- Tenkorang, F. A. (Author & Presenter), Bridges, D. E. (Author). 60th Mountain Plains Business Conference, 2019, "Oligopsony Power in the U.S. Hog Market," Mountain Plains Business Conference, Brookings, SD. (October 2019).
- Bridges, D. E., Fleig-Palmer, M. (Presenter) 2017 Great Plains Economic and Business Annual Conference, "Is QALY the Answer to Good Stewardship in Health Care?" Nebraska Economics and Business Association, Omaha, Nebraska. (2017).
- Lear, J. L. (Author & Presenter), Bridges, D. E. (Author), Van Horn, B. (Author & Presenter), Hodge, K. A. (Author & Presenter). Great Plains Economic & Business Annual Conference, "Impacting the 21st Century Student Learner," NE Economics & Business Association (NEBA), Omaha, NE. (October 27, 2017).
- Bridges, D. (June, 2017). "UNK's Agribusiness Program." Invited presentation to the Nebraska Cooperative Council Summer Meeting, Kearney, Nebraska.
- Fleig-Palmer, M. and D. Bridges. (November, 2016). "The QALY Metric: Composition & Ethical Implications." Invited presentation to the CHI St. Francis Cancer Treatment Center, Grand Island, Nebraska.
- Bridges, D. (November, 2016) "Status of the Farm Economy: Will History Repeat Itself?" Paper presented at the Academy of Business Research Winter Conference, San Antonio, Texas.
- Tenkorang, F. A. (presenter) and D. Bridges (February, 2015). "The Impact of Nebraska Ethanol Production on Corn and Soybean Prices Volatility." Paper presented at the 22nd Annual Meeting, American Society of Business and Behavioral Sciences, Las Vegas, Nevada.
- Bridges, D. (November, 2014) "Using a Monthly Price Index for Formulating Price Expectations: Nebraska Corn Prices." Paper presented at the Academy of Business Research Winter Conference, San Antonio Texas.

NON-REFEREED PUBLICATIONS

- Tenkorang, F. A., Bridges, D. (2015). "Nebraska, sprinkled with corn and ethanol." *Just Plains Folks:* Studies of the People of the Great Plains.
- Tenkorang, F.A., Bridges, D. (2015). "Prosperity and Population." *Open for Business Magazine* (March/April).

MEMBERSHIPS

North American Colleges and Teachers of Agriculture Phi Kappa Phi -- Honor Society

PROFESSIONAL ASSIGNMENTS AND ACTIVITIES

Peer Reviewer for Higher Learning Commission	2016 – present
Academic Program Review Member for Nebraska College	
of Technical Agriculture's General Education Program	2018
External Evaluator for Black-Hill State University's General Studies APR	2017

University Service

CBT Representative and Chair, Faculty Senate Academic Affairs Committee	2017 – present
Chair, CBT Academic Affairs Committee	2017 – present

Gregory O. Nies

University of Nebraska at Kearney
Marketing, Agribusiness & Supply Chain Management
(308) 865-8461
Email: niesg@unk.edu

Education

JD, University of Connecticut School of Law, 2004.

Major: Law

MS, University of Tennessee at Martin, 2020.

Major: Agriculture and Natural Sciences

Supporting Areas of Emphasis: Agribusiness and Risk Management

Dissertation Title: Public Perception of Conventional Agricultural Practices and Vaccination Recommendations: Examining the Correlations of Mistrust of Authority and Misperception of

Health and Safety Risks in Rejection of GMO Products and Vaccination Hesitancy

MA, Baylor University, 2006.

Major: Church and State Studies

BA, University of Nebraska at Omaha, 1996.

Major: History

BS, Grace University, 1996.

Major: Bible and Humanities

Professional Positions

Academic - Post-Secondary

Assistant Professor, University of Nebraska at Kearney. (2021 – Present) Adjunct Professor, Aguinas College. (2007 - 2011).

Law

Staff Attorney, Tennessee Court of Appeals. (2018 - 2021)
Staff attorney and Special Master, Davidson County (TN) Chancery Court. (2012 - 2018)
Assistant Attorney General, Office of the Tennessee Attorney General. (2006 - 2012)

Agriculture

Nies Farms, Ashley, ND. Agriculture Property Management. (2011 – Present) Nies Farms, Ashley, ND. Producer - Soybeans & Hard Red Spring Wheat. (2011 – 2015) WeedCope, Inc., Omaha, NE. Commercial Pesticide Applicator. (1994 - 1995) BASF Corporation. Assistant Technical Development Representative. (1991 - 1992)

Licensures and Certifications

License to Practice Law, State of Tennessee. (October 2004 - Present).

Professional Memberships

Nebraska Economics and Business Association. (2021 - 2022). Agricultural and Applied Economics Association. (2017 - 2022). American Agricultural Law Association. (2017 - 2022). Southern Agricultural Economics Association. (2020 - 2021).

Teaching Experience

University of Nebraska at Kearney

AGBS 350, Economics of the Agriculture Sector, 1 course AGBS 398, Farm and Ranch Management, 1 course. ECON 270, Prin. of Econ-Macro, 2 courses.

Journal Articles

Nies, Gregory, "Farm Bureau Mut. Ins. Co. v. Kurtenbach: Choosing the Road Less Traveled." 10 Connecticut Insurance Law Journal, 201 (2003)

Presentations Given

- Nies, G. O. (Presenter). 2021 Great Plains Economic and Business Conference, "Examining Correlations of the Role of Mistrust of Authority and Misperception of Health and Safety Risks in Rejection of Modern Agricultural Practices and Vaccination Hesitancy," Nebraska Economics and Business Association (NEBA), Bellevue, NE. (October 29, 2021).
- Nies, G. O. (Author & Presenter), Tewari, R. (Faculty Mentor), Mehlhorn, J. (Faculty Mentor). Canadian Agricultural Economics Society Annual Meeting, "Examining Correlations of the Role of Mistrust of Authority and Misperception of Health and Safety Risks in Rejection of GMO Products and Modern Agricultural Practices," Canadian Agricultural Economics Society (CAES), Online (due to COVID-19). (June 2021).
- Nies, G. O. (Author & Presenter), Tewari, R. (Faculty Mentor), Mehlhorn, J. (Faculty Mentor). Southern Agricultural Economics Association Annual Meeting, "Examining Correlations of the Role of Mistrust of Authority and Misperceptions of Health and Safety Risks of GMO Products," Southern Agricultural Economic Association (SAEA), Online (due to COVID-19). (February 7, 2021).

Professional Service

Reviewer, Journal Article, Mountain Plains Journal of Business & Technology, Kearney, Nebraska. (November 1, 2021 - November 29, 2021).

Appendix E:

Library Resources / Services

The following information about Calvin T. Ryan Library was provided by Lindsay Brownfield, Assistant Professor and Coordinator of Academic Services, from the Library's APR Self-Study document.

FACILITIES & GENERAL STATISTICS

The library's services and collections are based in the Calvin T. Ryan Library, which was built in 1963 and expanded in 1981-82 to its present size. The library is open approximately 3,750 hours per year. During FY 2019-20, library entrance gates recorded 111,937 visits to the library, which reflects the COVID-19 related closure for the major of spring 2020.

The library offers study and classroom seating to accommodate over 1,100 library users. Group study rooms, individual study carrels, tables, comfortable seating, photocopying and scanning facilities, three instructional computer labs, and a coffee shop are some of the amenities available within the library to support research and curriculum needs. The Learning Commons, which includes Academic Peer Tutoring and the Writing Center, is located on the library's second floor.

Over 160 desktop and laptop computers are available to library users. These computers are equipped with a full suite of productivity applications. In addition, computers in the West Lower Level Lab have SPSS, Mathematica, R, Matlab, and other specialized software available. Media production applications are also available on select computers. Access to the University's secure wireless network is available; guest access to wireless is available for those who are not affiliated with the University.

The library also makes available equipment for checkout, including 29 laptops, microphones, tripods, and other materials.

STAFF INFORMATION

The library has 23 employees. In addition to the Dean, the library includes 7 library faculty members, 7 professional staff, and 8 support staff positions. The library also employs many student workers.

Library faculty members are assigned to liaise with specific academic departments and programs. These liaison assignments are posted on the <u>library's website</u>. The librarian liaison works with faculty members of the academic department to identify resources to add to the library's collections. In addition, the librarian liaison offers instructional classes to the department, to increase awareness of library resources, improve information literacy, and enhance scholarship. The librarian liaison also maintains online research guides to assist faculty and students in navigating library resources related to that discipline. Research assistance from the librarian liaison is also available through email, online appointments, telephone, and in-person consultations.

Special Collections

The library's collections include several specialized collections, including the <u>University Archives</u> and Special Collection, <u>Government Documents</u>, <u>Curriculum Collection</u>. Archival materials include documents, photographs, and realia related to the institution's history from its founding in 1905 through the present day. Graduate student theses and published documents from the departments that make up the University are also retained in the Archives. The library's Special Collection includes about 2,500 cataloged items, mostly books, concerning the history of Nebraska, the Great Plains, and the American West. Items related to rural schools, including oral histories and photographs, are also being collected.

Government Documents

The library serves as a federal and state depository of government documents. It has been a selective depository of U.S. Government publications since 1962, with more than 275,000 federal publications in print and microform formats, and cataloged access to over 20,000 federal publications. As a Nebraska State Depository Library, Government Documents also contains about 17,000 state documents in print, microform and online formats.

Digital Repository

<u>OpenSPACES</u> is the campus's institutional repository. Research, scholarship, and creative works of faculty, students and staff are gathered, preserved, and shared with a global audience. OpenSPACES hosts several journals. OpenSPACES can also assist faculty with making their work – scholarship, creative activity, teaching materials, etc. - freely available while also respecting copyright.

SERVICES

Learning Commons. The UNK Learning Commons is a collaboration of the CTR Library and the Division of Student Affairs. Located on the second floor of the library the Learning Commons centralizes academic support services to foster student confidence and independence in a collaborative learning environment. Programs offered in the Learning Commons are subject tutoring, language tables, supplemental instruction, and the Writing Center.

Reference / Research Assistance. Research assistance from library faculty is available in-person, by telephone, appointment, email, text, and online chat. <u>Ask a Librarian</u> is the central portal for research assistance services.

Course Reserves. Faculty may place course reserve materials at the library's circulation desk for students to access. Electronic reserves provide 24-7 online access to supplemental readings via the library's e-reserves system. Physical reserves may include personal copies or library copies of books, videos, CDs, or other materials.

Library Instruction. Library instruction is a service provided by librarian liaisons to each academic department and program. Assistant Professor Lindsay Brownfield, Coordinator for Academic Services, is the librarian liaison to the Department of Agribusiness.

In addition, the Library Research Tutorial is available via Canvas for all faculty. The online tutorial allows students to broaden their familiarity with library resources and learn basic information literacy skills at their own pace and with the benefit of online assessments, outside of scheduled classroom instruction time.

Interlibrary Loan/Document Delivery. The library offers an interlibrary loan/document delivery (ILL/DD) service to all UNK faculty, students, and staff to support their research and instructional needs. Books, microforms, journal or magazine articles, government documents, musical scores, and other items not owned by the Calvin T. Ryan Library may be requested from other libraries through Interlibrary Loan. Document delivery is a service by which library-owned materials are made available to distance learning students. The library pays for the costs of requesting and shipping materials associated with ILL/DD service. This service expands faculty and student access to materials which the Library does not own.

Final Schedule

Date / Time	Location	Meeting with:
April 10 - afternoon		External Reviewer arrives in Kearney
April 11		
7:30 a.m. 8:45 a.m.		Orientation meeting with Review Team
		members, Department Chair / Program
		Director; College Dean
9:05 a.m. – 9:55 a.m.	WSTC 152W	AGBS Students (AGBS 350 class period)
10:15 a.m. – 11:00 a.m.	WSTC 120E	College Dean
11:15 a.m. – 12:00 p.m.	WSTC 120E	Department Chair
12:15 p.m. – 1:30 p.m.	WSTC 142W	Working lunch
1:45 p.m. – 2:30 p.m.	WSTC 120E	AGBS faculty
2:45 p.m. – 3:30 p.m.	WSC 120E	Director of Assessment
3:30 p.m. – 5:00 p.m.	WSTC 142W	Working session
April 12		
7:30 a.m. – 8:45 a.m.	WSTC 142W	Working session
9:00 a.m. – 9:45 a.m.	WSTC 120E	Oral reports to AGBS faculty and Department
		Chair
10:00 a.m. – 10:45 a.m.	Warner Conference	Oral reports to SVCASA, College Dean,
	Room (Warner Hall)	Department Chair / Program Director
		(waiting on confirmation with SVCASA's
		Office)